



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

1 007.60.47.52



**HARVARD COLLEGE
LIBRARY**

—
**WRITINGS
OF THE
CLASS OF 1894**

—
GIFT OF THE AUTHOR

THE PORT AND CITY
OF
PHILADELPHIA

Prepared by
FRANK H. TAYLOR
and
WILFRED H. SCHOFF
For the
12th. INTERNATIONAL CONGRESS
OF NAVIGATION



PUBLISHED BY THE LOCAL ORGANIZING
COMMISSION OF THE CONGRESS
PHILADELPHIA
MAY 1912

52
Local Organizing Commission for the XIIth Congress

Permanent International Association of Navigation Congresses

Rooms 348-349-350-351 The Bourse
Philadelphia, Pa.

OFFICERS

Honorary President: HON. WILLIAM H. TAFT, President of the United States
Honorary Vice-Presidents: { HON. JOHN K. TENER, Governor of Pennsylvania
HON. RUDOLPH BLANKENBURG, Mayor of Philadelphia
J. HAMPTON MOORE, President
WILLIAM T. TILDEN, Vice-President
GEORGE F. SPROULE, Secretary-Treasurer

COMMITTEES

Executive

J. S. W. HOLTON Chairman

Patrons

DIMNER BEEBER Chairman
EMORY R. JOHNSON Vice-Chairman

Finance

EDWARD T. STOTESBURY Chairman
J. S. W. HOLTON Vice-Chairman

Place of Meeting

WILLIAM P. WILSON Chairman
WILLIAM H. HOLLAR Vice-Chairman

Hotel Accommodations

JAMES B. BONNER Chairman
SAMUEL L. KENT Vice Chairman

Publications

WILFRED H. SCHOFF Chairman
E. W. DRINKER Vice-Chairman

Transportation

GEORGE E. BARTOL Chairman
WILLIAM O. HEMPSTEAD, Vice-Chairman

Press

N. B. KELLY Chairman
CLINTON ROGERS WOODRUFF
Vice-Chairman

Reception

FRANK D. LALANNE Chairman
HORACE A. DOAN Vice-Chairman

Entertainment

WILLIAM T. TILDEN Chairman
MURDOCH KENDRICK Vice-Chairman

Local Excursions

JOSEPH F. HASSKARL Chairman
H. F. STETSER Vice-Chairman

Inspection of Public Works

LT. COL. J. C. SANFORD Chairman
COLEMAN SELLERS, JR. Vice-Chairman

Ladies'

THEODORE KOLISCHER Chairman
JAMES MAPES DODGE Vice-Chairman

Exhibition

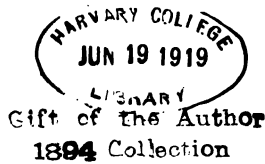
ALBA B. JOHNSON Chairman
EDGAR C. THOMAS Vice-Chairman

EXECUTIVE COMMITTEE (Honorary Members)

HON. GEORGE D. PORTER, Director of the Department of Public Safety, City of Philadelphia
HON. MORRIS L. COOKE, Director of the Department of Public Works, City of Philadelphia
HON. HERMAN LOEB, Director of the Department of Supplies . . . City of Philadelphia
HON. JOSEPH S. NEFF, Director of the Department of Public Health and Charities
City of Philadelphia
HON. GEORGE W. NORRIS, Director of the Department of Wharves, Docks and Ferries
City of Philadelphia
HON. HARRY C. RANSLEY, President of Select Council City of Philadelphia
HON. GEORGE MCCURDY, President of Common Council City of Philadelphia



Commerce.



Index

	PAGE
The Story of the Delaware River	9
Strategic Position of Philadelphia	14
Old Canal Systems	17
From Sea to City	21
Commissioners of Navigation for the River Delaware and its Navigable Tributaries	25
Department of Wharves, Docks and Ferries	29
A New Immigrant Station	33
Summary of Work Performed by the Department of Wharves, Docks and Ferries from July 10th, 1907, up to and including December 31, 1911	34
The National Quarantine	36
The State Quarantine	37
The Pilots of the Delaware	39
Making Ready for Future Commerce	41
The Philadelphia Maritime Exchange	47
Local Freightage Facilities	49
Steamship Service	51
Coastwise Lines	51
The City Ice Boats	53
Training for Navigators	53
The United States Navy Yard	56
Ship Building	57
The Atlantic Deeper Waterways Association	63
The City of Philadelphia	67
The City Streets	71
Names of Streets Running East and West with Numbers of Houses	72
Local Transit	75
Homes for Everybody	77
Fairmount Park	79

City Government	
Side Glimpses of Philadelphia	
Philadelphia en Fete	
Hotels, Clubs and Theatres	
Club Directory	
Amusements	
Taxicab Tariffs	
Condensed Philadelphia Facts	
Industrial Brevities	
Philadelphia Manufactures	
Leading Business Organizations	
Joint Executive Committee on the Improvement of the Harbor of Philadelphia and the Delaware and Schuylkill Rivers ..	
Buildings and Places of Historical Interest	
The United States Mint	
Science, Art and History	
The Commercial Museum	
The Mills and Factories	
Sea Shore Resorts	
Camden, N. J.	
Bristol, Pa.	
Trenton, N. J.	
Other Up River Industries	
The Welsbach Plant, Gloucester, N. J.	
Chester, Pa.	
Wilmington, Del.	
The Powder Makers of the Brandywine	
The First Passenger Steamboat	
Foreign Consuls at Philadelphia	
Officers and Trustees of the Leading Commercial Organizations of the City	157, 158



Officials of the City of Philadelphia

Mayor

HON. RUDOLPH BLANKENBURG

Director of Public Safety	GEORGE D. PORTER
Director of Public Works	MORRIS L. COOKE
Director, Department of Supplies	HERMANN LOEB
Director of Health and Charities	JOSEPH S. NEFF, M.D.
Director, Department of Wharves, Docks and Ferries .	GEORGE W. NORRIS
President, Board of Education	HENRY R. EDMUNDS
Superintendent of Public Schools	DR. MARTIN G. BRUMBAUGH
City Controller	JOHN M. WALTON
Department of Law	MICHAEL J. RYAN
Receiver of Taxes	HUGH BLACK
City Treasurer	MURRELL DOBBINS
Recorder of Deeds	ERNEST L. TUSTIN
Board of Revision of Taxes	{ SIMON GRATZ J. WESLEY DURHAM DAVID N. FELL, JR.
Register of Wills	DAVID MARTIN
Sheriff	A. LINCOLN ACKER
District Attorney	SAMUEL P. ROWAN
President, Select Council	HARRY P. RANSLEY
President, Common Council	GEORGE P. MCCURDY

Federal Offices and Officials

Located in Philadelphia Allied to Maritime Interests

U. S. CUSTOM HOUSE
 Collector, Chester W. Hill Chestnut Street, below Fifth

REVENUE CUTTER "WISSAHICKON"
 Commander, Lieut. Robert E. Wright, U. S. R. C. S.

SHIPPING COMMISSIONER
 Augustin R. Smith 500 South Delaware /

LIGHTHOUSE SERVICE
 Inspector, T. J. Rout Post Office B

U. S. APPRAISERS STORES
 Deputy Surveyor, Richard B. Williams 134 South Second

IMMIGRATION SERVICE
 Commissioner, John J. S. Rodgers 134 South Second

BUREAU OF NATURALIZATION
 Chief Examiner, Jerome C. Shear Post Office B

HYDROGRAPHIC OFFICE
 In Charge, Lieut. Levin J. Wallace, U. S. N.

U. S. NAVY YARD
 Commandant, Capt. A. W. Grant, U. S. N. League

MARINE HOSPITAL SERVICE
 Surgeon in Charge, W. G. Stimpson, M. D. 410 Chestnut

MARINE CORPS DEPARTMENT 1100 South Broad

NAVAL HOME
 Governor, Rear Admiral Albert Mertz, U. S. N. Gray's Ferry /

NAVAL HOSPITAL
 Medical Director, R. C. Persons, M. D., U. S. N. Gray's Ferry /

U. S. ENGINEERS
 In Charge, Major Herbert Deakyne, U. S. N. Witherspoon B

LOCAL INSPECTORS OF STEAM VESSELS Post Office B

NAVY PAY OFFICE
 Pay Inspector, Samuel McGowan, U. S. N. Post Office B

U. S. NAVAL RECRUITING STATION
 In Charge, Lieut. F. A. Todd, U. S. N. 1413 Filbert



Pennsylvania State Officials Located in Philadelphia Allied to Maritime Interests

STATE QUARANTINE BOARD

President, Richard A. Cleeman; Secretary, Henry D. Heller, M. D.
204 Bullitt Building

BOARD OF COMMISSIONERS OF NAVIGATION

George W. Norris, J. W. S. Holton, Coleman Sellers, Jr.; For Chester,
W. H. Sproul; For Bristol, H. H. H. Poole.
Secretary, George F. Sproule 348 Bourse

PENNSYLVANIA NAUTICAL SCHOOL

President, Richard B. Williams; Secretary, Frank S. Lawrence.
Directors (appointed by the Governor), Benjamin P. Obdyke, Lodge
Cotton, Richard B. Williams.
Directors (appointed by the Mayor), James H. Gay, Dr. B. J. Rudderow,
John H. Baizley. 16 North Delaware Avenue

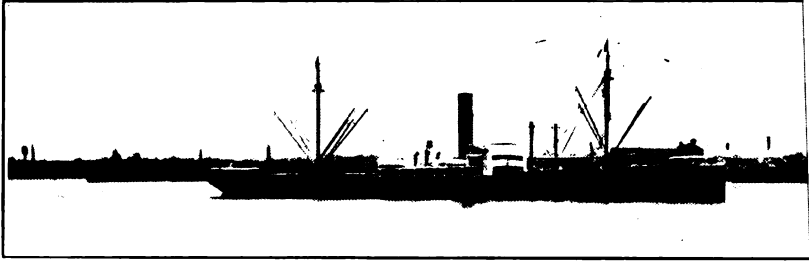
Philadelphia City Offices and Officials Allied to Maritime Interests

DEPARTMENT OF WHARVES, DOCKS AND FERRIES

Director, George W. Norris; Assistant Director, John Meigs . . . 553 Bourse

CITY ICE BOATS

Superintendent, James S. Jefferson 553 Bourse



The Port and City of Philadelphia

The Story of the Delaware River

HISTORIANS differ with regard to the discovery, Europeans, of the broad and busy river which we call Delaware, but those who have the most credence give the honor to Lord Delaware, who probably entered the estuary in the year 1610, a year following the voyage of Hendrick Hudson up the River of the North. But all agree that one Captain Cornelius Jacobson Mey came here in 1623 and built a fort at the mouth of Timber Creek (Gloucester, N. J.), which he called "Nassau." The colonists located here were eventually killed by the Indians. An ancient document bearing date of July 1st, 1630, is still preserved at Amsterdam, under which patent Samuel Godwin and Santh Bloommaert secured title to "the Bay of the South river," otherwise Delaware Bay, and there was a lively scramble in the old Dutch territory among the members of the West India Company to secure grants along the coast, and the attempt to colonize the region was renewed.

The Dutch ship *Walvis* arrived at the capes early in 1631, bringing colonists who settled near Lewes, Delaware. In 1633, a party of Dutch built a fort and trading post upon the Schuylkill River near what is now Bartram Park. Five years later an expedition of Swedes came upon the scene in the ships *Key of Colmar* and *Griffin*. These people who were destined to impress their enterprise so well upon this region made permanent European settlement upon Christiana Creek; and an outcropping ledge within the boundaries of the city of Wilmington where they landed, and which may yet be seen, is esteemed as Plymouth Rock of the early colonists upon the "South River."



Gloria Dei (Old Swedes') Church at Philadelphia.

A Swedish governor, Lieutenant John Prinz, came in 1643, backed by two warships, and at Tenecong (now Tinicum) set up his capital and thereby established the earliest organized government within the limits of the domain now included in the State of Pennsylvania.

Following closely upon the surrender of Manhattan by the Dutch to the English, there came to the South River a British fleet, and having taken the Swedish fort at Christiana, the British Government held the balance of power, compelling the cession by the Hollanders of all their American possessions to the English crown in 1674.

Seven years later, when William Penn came to inspect his possessions, he found the shores of the river already well settled and the people, of several races, dwelling together in amity. It was then that he wrote "The country hath the advantage of many creeks, or, rather, rivers, that run into the main river or bay; some navigable for great ships, some for small craft. Those of the most eminence are Christiana, Brandywine, Skilpot and Sculkill, any one of which have room to lay up the Royal Navy of England, there being from four to eight fathoms of water."



Type of William Penn's Ship "Welcome." From Contemporary Engraving



Philadelphia in 1827.

After two years of oversight for the welfare of his colonists and the planning of his "greene country towne," Penn returned to England to meet many troubles. He came again to America in 1699 to find his Philadelphia grown to a population of 4,500 and a good showing of houses, stores, wharves, churches and schools arrayed near the shores of the river. In all, William Penn dwelt in his colony less than four years, but he left a legacy of goodwill, fair play and wise conduct behind him which centuries have not effaced, and this great city yet remains proud of its title as the community of "brotherly love."

Mr. Clement A. Griscom, writing some years ago, said "William Penn followed every precedent when he chose as the site for his city the head of navigation, but that he found the river navigable for such a great distance is, in many ways, unfortunate for Philadelphia. Although the great cities of the world are almost invariably found at the head of navigation, yet they are always within a comparatively short distance from the mouth of the particular river upon which they happen to be situated. The location of New York City is ascribed to the baffling winds and strong tides of the river as Hudson and later explorers found them."

Whatever may have been the course of reasoning impelling the Proprietor to establish the chief city of his still but half-explored domain, the fact that the small acorn of civilization he planted on this shore has become a great oak, stamps his act as one of rare foresight.



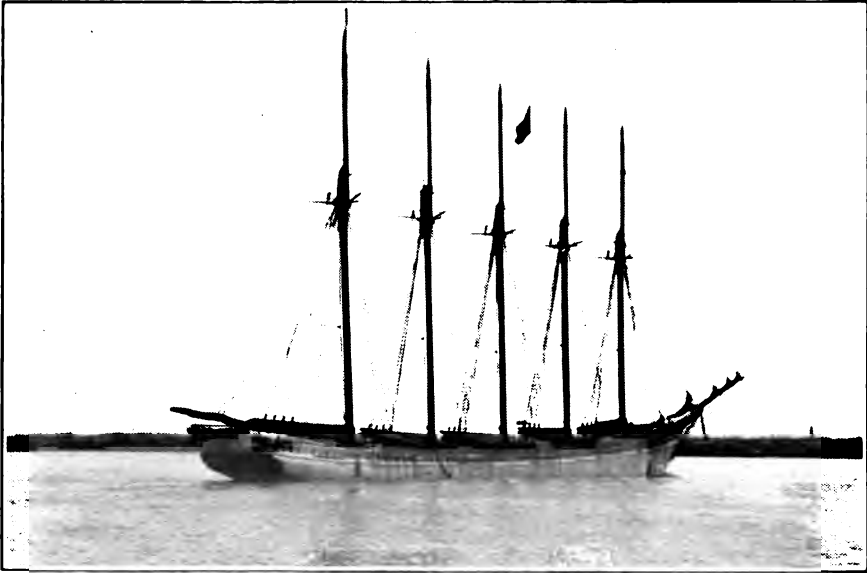


Steamship Haverford Leaving Philadelphia.

Strategic Position of Philadelphia

Philadelphia is one hundred and three miles from the capes of the Delaware, but this disadvantage is now largely offset by the city's proximity to the great iron, coal and oil fields of the state, making this the natural point for vast and ever-growing manufacturing and exporting enterprises. Aside from this control of mineral resources, however, shipping activity developed with the growth of the community. In the period of the Revolution Philadelphia was the commercial as well as the patriotic centre of the nation. The exports of the city amounted, in 1796, to \$17,000,000 and in another decade to \$31,000,000. The effects of the War of 1812 were so disastrous that they were felt for a full generation. Our combined exports and imports were also greatly reduced through the Civil War period, but from \$18,282,000 in 1861 they have increased, through many fluctuations, to \$145,803,286 in 1910. The inbound and outbound traffic for 1911 amounted to \$151,477,079, which exceeds the figures of any previous year, with regard to exports, to which the increase is due. Our largest items of importation are sugar and goat skins. Petroleum, coal, cotton, cereals, livestock and





A Fine Type of Coasting Schooner.

manufactured goods make up the bulk of exports. Since 1903 this port has gained slightly upon New York in sugar imports, but has lost upon petroleum shipments about one-third. The progress made is due to improved handling facilities and to the constant work expended upon a deeper channel to the sea. At a largely attended meeting of the Maritime Association of New York, held upon January 17th last, to consider the local problems of freightage handling, Dock Commissioner Tompkins informed the members that after a personal inspection of the terminal work completed and under way in Philadelphia he was impressed as to how well the latter city, in common with Boston and Baltimore, was progressing in the work of preparation for increased traffic. He also said that "New York is one of the best ports to enter, but one of the most expensive to get through." The significant admission forecasts the crowding out of New York of a large amount of traffic which will naturally seek this port when depth of water and convenient, economical wharf facilities are offered. With all of her thronging difficulties, however, New York's combined export and import business increased, in 1911, by the amount of nearly \$71,000,000 and is now more than ten times that of the Port of Philadelphia. Of the 869 vessels clearing with cargoes for foreign



Through the Chesapeake and Delaware Canal. Towing Barges Laden with Railroad Ties.

countries from this port, more than ninety per cent. sailed under foreign flags. Vessels cleared from this port in 1910 in the coastwise trade numbering 4,418, with approximately the same number of arrivals. More than fifty per cent. of these were sea-going barges. The decline of the sailing ship in the coasting trade is illustrated by the fact that but 524 ships, barks and schooners left this port in 1910, and of these all but twenty were of the latter class. In the same year the number of clearances of coasting steamers increased to 1,571, this being a record figure.

Old Canal Systems

The Delaware and Hudson Rivers have long been connected by canals. One of these, the Delaware and Hudson, extended from Honesdale, Pa., to Rondout Kill, a distance of one hundred and eight miles. The Morris Canal from Phillipsburg, opposite the mouth of the Lehigh River, crossed New Jersey to Jersey City, a distance of one hundred and two miles, and the Delaware and Raritan Canal extends



**A Tow of Coal Barges Starting for New England.
About 5,000,000 tons leave Philadelphia yearly for coastwise delivery.**



The Water Gap.
A Feature of the Picturesque Upper Delaware River.

from Bordentown, N. J., to New Brunswick, N. J., on the Raritan River, a length of forty-four miles. From the lower reaches of the Delaware River at Port Penn, the Chesapeake and Delaware Canal crosses the peninsula by a ten-foot channel to the Chesapeake, a distance of fourteen miles. This now obsolete link was opened in 1829, but after many years of discussion definite plans are now under way to supersede it with a new canal as a part of an adequate inland waterway system, which also includes a modern canal upon a new route across New Jersey to New York Bay. The urgent need of the construction of these connecting links is generally recognized.

The story of the inland system of canals within the State of Pennsylvania forms an important chapter in the annals of the Commonwealth. The discovery of stone (anthracite) coal in the Lehigh region in 1792 was of no commercial importance until the waterways constructed between 1820 and 1830 were in operation, and when this was accomplished Philadelphia's triumphant career as a manufacturing centre began.



A British Visitor, laden with Spanish Iron Ore.

Sixteen years before the first turnpike road in the United States was completed between Philadelphia and Lancaster, Pa., and forty-one years before the State railroad from Philadelphia to Columbia, Pa., was opened for traffic, Robert Fulton addressed a letter to President Washington, urging the economic value of a canal system for both goods and passengers. Pennsylvania encouraged this method of communication between the coast and the interior to such an extent that some of the old charters are still existent, and the ruins of massive locks are yet to be seen in many picturesque valleys. As late as 1872 there were in operation 1,085 miles of canals within the State.

In 1840, when the population of Philadelphia exceeded a quarter-million of residents, the canal packet was still an important means of travel. In later times the railroads acquired and abandoned many of the old canals, but a few of them still remain.

The port of Philadelphia was seriously affected by the completion of the Erie Canal in 1825, which gave New York City cheap freightage connection with the great lakes, and the State of New York has consistently maintained this water-route which is being utilized, for much of its course, in the \$101,000,000 barge canal the Commonwealth now has in hand.



National Harbor of Refuge.

From Sea to City

The traveler approaching the broad entrance of Delaware Bay from the seaward first sights the Northeast End and the Five-Fathom Bank Lightships located respectively twenty miles eastward and eighteen miles southeastward from Cape May Point. Having left these astern the distant shore rises above the horizon. The Capes are twelve miles apart. Cape May is of the first order. The tower is 159 feet high. This light was established in 1823. Crowning a lofty sand-hill at Cape Henlopen is the opposite light, also of the first order upon a tower 126 feet high. This light has guided mariners since 1764. Northward from Cape Henlopen is the old Breakwater guarded by two lights and beyond is the National Harbor of Refuge. The Maritime Exchange Reporting Station is upon the old Breakwater. The pilot is guided in his course up the river by forty-eight lights of varying power. Ten trumpets and bells warn him in foggy weather. The channel is defined by tangents or "ranges." The greatest width of Delaware Bay is twenty-three miles. The Bay narrows to five miles at Bombay Hook, and varies from this width to one mile, just below Philadelphia.

In the open reaches of the Bay are Brandywine Shoal Light, Fourteen Foot Bank Light, Cross Ledge Light, and Ship John Shoal Light. Upon the Delaware shore are Mispillion Creek Light, Mahon River Light and Bombay Hook Light. Maurice River Light, Egg

Island Light and Cohansey Light are upon the New Jersey shore. Above these are the numerous Range lights.

At Reedy Island is located the upper National Quarantine Station and a few miles above grim old Fort Delaware comes into view. This is the principal defensive work of the river. Fort Delaware stands upon an island of about 125 acres in the centre of the stream.



Light House, National Harbor of Refuge.

The fort was completed in 1850. It is an irregular pentagon, three tiers high with bastions at the corners. Formerly it was armed with about one hundred smooth-bore twelve-inch cannon with a number of "columbiads." In recent years it has been equipped with a powerful modern armament supplemented with long-range shore batteries upon



The Bourse. Offices of the Maritime Exchange and other Commercial Bodies are located here.

Finn's Point, N. J. During the Civil War the fort was used as prison for thousands of captured Confederate soldiers. Above the fort, upon the Delaware shore, are the sites of the historic Swedish, Dutch and English settlements, of which the quaint and picturesque town of New Castle is the centre. Next in view is seen the busy manufacturing city of Wilmington, Delaware.

At Marcus Hook is the Pennsylvania State Quarantine Station, the upper lock of the port, and just above, Chester, Pa. The site of the ancient Tinicum, where the first organized government in the province was established by John Prinz in the name of the Swedish Government, is now the headquarters of several of the yacht clubs, and here, also, is the quaint building of the Lazaretto, the first quarantine station located upon the river. It is now utilized for club purposes.

Below the junction of the Schuylkill River with the Delaware is another relic, old Fort Mifflin, famed in the annals of the Revolution, and opposite, upon the New Jersey shore at Red Bank, is not a lofty shaft marking the site of a Revolutionary battle. In front is the United States Navy Yard and beyond, the City of Philadelphia.



Trans-Atlantic Piers, International Navigation Co. and Pennsylvania R. R.

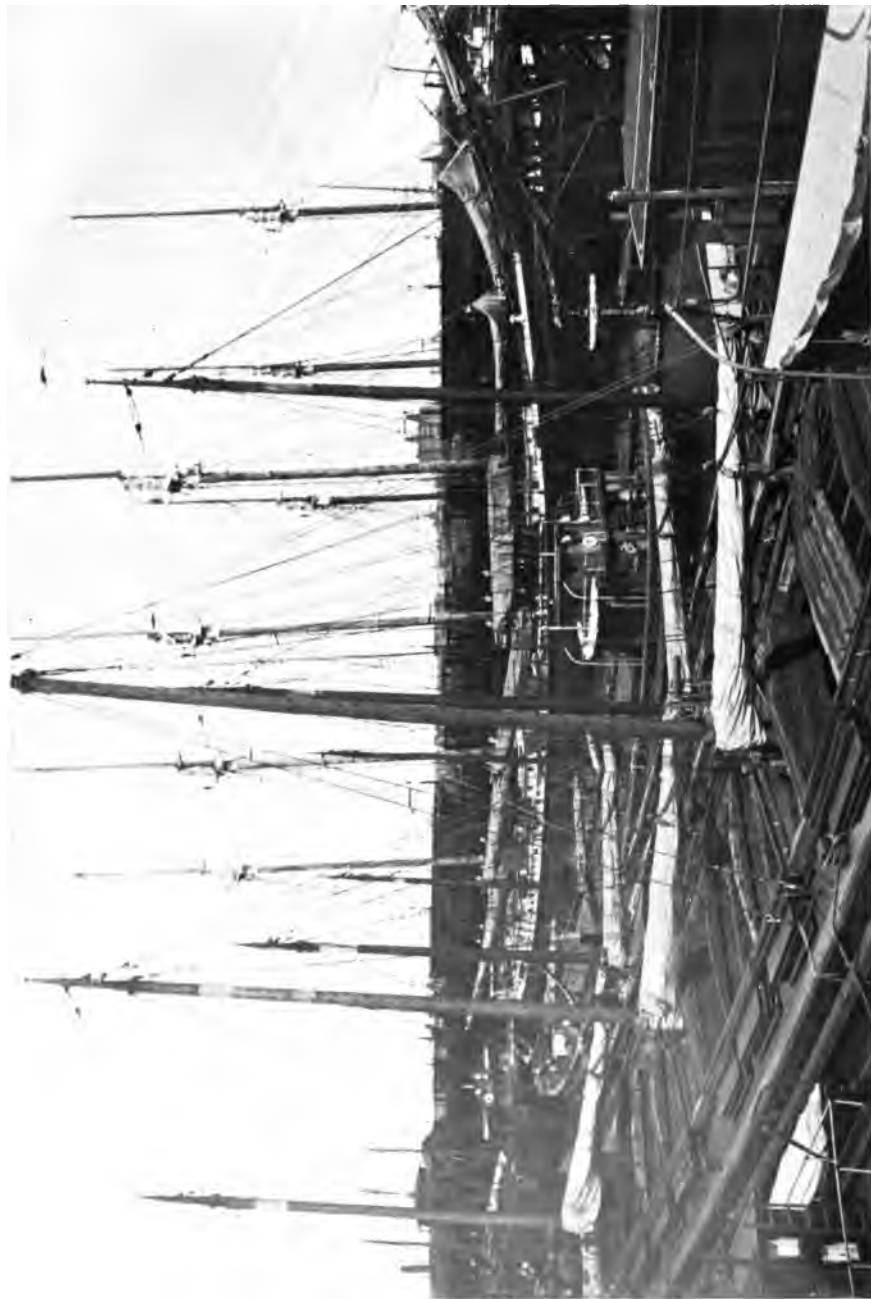


Clyde Line Piers, Coastwise Steam Transportation.

Commissioners of Navigation for the River Delaware and Its Navigable Tributaries

This commission was created by an Act of Assembly approved the 8th day of June, A. D. 1907, and consists of five members. It was organized for business October 28th, 1907. The President thereof is the Director of the Department of Wharves, Docks and Ferries of the City of Philadelphia. Two members are appointed by the Mayor of the City of Philadelphia, from such commercial bodies as the Councils of said City may designate; one member is elected by the Council of the City of Chester and the other member by the Burgesses and Council of the Borough of Bristol. Their principal office is the office of the President who is the Director of the Department of Wharves, Docks and Ferries of the City of Philadelphia. They hold office for a term of four years and they are eligible for re-appointment. They receive no compensation but are reimbursed for necessary expenses.

They are authorized to make rules for the regulation, stationing and anchoring ships, vessels, boats, etc., in the Delaware River and



Schooners Awaiting Coal for Coastwise Delivery, Port Richmond.



Port Richmond Grain-Elevator.

its navigable tributaries, or at the wharves, piers or bulkheads, or in the docks, slips or basins, extending into or on the said river and its navigable tributaries.

They have power, after public hearing, to issue or refuse licenses for the construction, alteration or improvement of any wharf or harbor improvement on the Delaware River or its navigable tributaries within the State of Pennsylvania, outside of the City of Philadelphia.

They also have power, upon information of the sinking of any canal-boat, barge or other vessels in the channelway of the tide-waters of the river Delaware or its navigable tributaries, or in any dock thereof to give notice to the owner, master or agent to raise and remove such obstruction within ten days from date of notice under penalty of one hundred dollars (\$100), and upon the failure to remove within the specified time, the Commissions shall remove the same and sell the property to the highest bidder.

In them is vested the authority to grant licenses to persons properly qualified to act as pilots in the bay and river Delaware, and to make rules for the government of said pilots while employed in



Municipal Pier, Chestnut Street.



Pennsylvania Railroad Ferryboat.

that service and to decide all differences which may arise between masters, owners and consignees of ships or vessels and pilots.

Department of Wharves, Docks and Ferries

This Department was created by an Act of Assembly of the State of Pennsylvania, approved the 8th day of June, A. D. 1907, and is in charge of a Director appointed by the Mayor of the City of Philadelphia and who holds office for a term of four years from the date of his appointment and is eligible for re-appointment.

The Department was organized for business under date of July 10th, 1907, by the appointment of a Director, but, owing to the summer adjournment of City Councils, the Department was not fully organized until November 1st of that year.

The Director has the power to make surveys and soundings, prepare plans therefrom and keep records thereof; also to regulate, fix and establish bulkhead and pierhead lines and distance between pier



Pier G, Port Richmond, Philadelphia.



Trans-Atlantic Steamer Docking at Port Richmond.

subject to the regulations of the United States Government and adopt and promulgate rules and regulations for the construction, extension, alteration, etc., of wharves, piers, bulkheads, etc.

He also has authority after appropriations by City Councils money required therefor, to acquire by purchase waste lands or lands that are partially waste (and to improve the same), wharves, piers and bulkheads, and to erect thereon such structures and buildings for storage and storage facilities as may be necessary for the proper and convenient use of the commerce of the port.

He has authority after appropriations by City Councils of money required therefor, to purchase, maintain and operate such launch boats, ice boats and dredges as may be necessary for the performance of the duties of the Department.

He has the authority to issue or refuse (after a public hearing) power to construct any public wharf, pier or bulkhead in the city of Philadelphia, to build, extend or alter piers, wharves, and bulkheads or other river improvements, and when he shall deem it expedient issue licenses to owners of riparian rights within the limits of the City of Philadelphia and when in the securing of sufficient dock room for co



Lumber Wharf, Schuylkill River.



Chestnut Street Bridge.

venient use thereof, it shall become necessary to acquire lands, leaseholds, easements, and other property rights, adjoining such wharf, pier or bulkhead for which no price can be agreed upon between the said Director and owners thereof, he can, after the passage of an Ordinance by City Councils, authorizing said entry and occupancy, enter upon and occupy said property adjoining such wharf, pier or bulkhead so to be erected, etc.

He has authority, after due advertising, to lease for a period not to exceed ten years, under such covenants and conditions as he may prescribe, storage facilities, wharves, piers and bulkheads, etc.

A New Immigration Station

The old town of Gloucester, New Jersey, often regarded as the southern suburb of Camden, gains in importance as a part of the Port of Philadelphia by the establishment, at this point, of the Immigration Station, now under construction. The new Government Pier is to be 400 feet long and 250 feet wide, of reinforced concrete. This provides an area considerably greater than that of any other pier in this port. A double-decked iron superstructure will be devoted to examination quarters and a hospital.



Schooner Loading Coal at Port Richmond Piers.

**Summary of Work Performed by the Department of
Wharves, Docks and Ferries from July 10, 1907,
up to and Including December 31, 1911**

During this period the City has removed 1,676,367 cubic yards of material from the Delaware and Schuylkill River Channels, City Docks and private docks where municipal sewers empty.

Has spent in repairs to City wharves, bulkheads and recreation piers, \$130,378.70.

Repairs are now under way to the amount of \$10,038.44.

Has spent for the purchase of land; additional for site of new Vine Street and Dock Street Pier, Delaware River, and a tract of about 407 acres on the Schuylkill River, \$511,280.20.

Has spent in building Vine Street Pier; concrete bulkhead across South Street, Delaware River; concrete bulkhead from Vine to Callowhill Street; preliminary work, etc., \$798,130.02.

Contracts have been awarded and work is now under way for the construction of a pier and bulkhead at the foot of Dock Street, Delaware River, amount of contract \$279,500.00; for the construction of





State Quarantine Boat, "Governor Pennypacker."

sailing vessels were inspected at Reedy Island. Especial supervision of the crews and passengers is enforced in the inspection of all vessels arriving from ports subject to yellow fever or the plague. During the year a total of 77,492 persons, of crews and passengers, were examined. The office of the United States Public Health and Marine Hospital Service is at 410 Chestnut Street, Philadelphia.

The State Quarantine

The station of the Pennsylvania State Quarantine, formerly located at Essington, is now situated at the boundary dividing Pennsylvania from Delaware, which touches the river at Marcus Hook. With the exception of a short period following the establishment of a national Quarantine service upon the Delaware River this Quarantine has been maintained by the Commonwealth for considerably more than a century. It is, in fact, the oldest Quarantine in the United States. With its improved facilities for inspection and the care of persons ill or under surveillance, the Marcus Hook Station is more effective than ever, but is still far from being what the Chief Quarantine Physician, Dr. Henry D. Heller, desires. This official has but two assistants and less than



State Quarantine Station, Marcus Hook, Pa. Texas Oil Tanker at Pier Above.

a dozen other employes under his direction. From the pleasant and carefully kept lawns surrounding the several buildings a pier extends to deep water, affording a landing for the boarding tug, "Samuel W. Pennypacker." The capacity of the Quarantine quarters are not above five hundred persons.

During the year 1911, 1,617 vessels were inspected and passed; three were detained for observation, and nine were detained for disinfection. 114,473 persons were inspected and passed. In addition to this work, 144 medical cases and 93 surgical cases were examined and treated.

The affairs of the State Quarantine are administered by a Board of seven members, of which the Chief Quarantine Physician is the executive officer. The offices are in the Bullitt Building, Philadelphia.



Pilot Boat "Philadelphia."

The Pilots of the Delaware

By an act of General Assembly passed the fourth day of October, 1788, the Pilot Service was established on the Delaware River.

The present Pilots' Association was formed of all the pilots in December, 1896. Since the formation of the association the service on the Delaware has been second to none in the world.

There are seventy-eight pilots in the Association. They are governed by the Commissioners of Navigation of Pennsylvania and the Pilot Commissioners of Delaware. They have two boats in service, one a steamboat, 148 feet long, 26 feet beam, 15 feet depth of hold, 359 gross tons; one a sail-boat, of the old type, 90 feet long, which acts as a tender to the steamboat.

The steamboat is stationed at Overfalls Light vessel, off Cape Henlopen and furnishes pilots to all incoming vessels and takes pilots



One of the Standard Oil Company's Fleet Carrying Oil to Asiatic Ports, Returning with Hawaiian Sugar. Steel Rigging Throughout. Length, 332 Feet. Tonnage, 2,987.

from all outgoing vessels, also renders service to the Port of Philadelphia as a reporting station. The Morse Code is used by night to report all vessels passing in or out of the capes, and in day-time a written report is sent to the Maritime Exchange Station. The pilot boat has rendered services, on several occasions, both to life and property.

The office of the Pilots' Association is at 319 Walnut street, Philadelphia.



U. S. Government Channel Dredge "Delaware."

Making Ready for Future Commerce

At the present time, Philadelphia, wherein is made five per cent. of all the manufactured goods produced in America, is turning with intelligent interest to the maritime problems peculiar to her situation and more effective effort is being made; more money is being appropriated now for channels, wharves and properly equipped terminals than ever before. Philadelphia, including the New Jersey shore of the port, has thirty-eight miles of shipping frontage, and there are hundreds of acres of bordering lands along both the Delaware and the Schuylkill



Unloading Iron Ore from a Steamer to Railway Car, Port Richmond, Philadelphia.



Philadelphia's Growing Navy Yard.

Rivers yet awaiting the building of vast factories from the very doors of which all manner of goods for other countries will be placed directly upon the ships. The future status of this port will depend largely upon the thoroughness of the preparation we may undertake to secure a full share of the world-trade which looms before us.

In the long sustained effort upon the part of the various trade bodies and interests closely identified with this port to regain for Philadelphia her natural place in the list of American seaports, there have been unusual natural and artificial obstacles. These include the insufficient depth of the water at several places in the hundred-mile channel from the sea; the control by corporations and private interests of the wharfage; the preponderating interest in manufactures without reference to export and finally the absence of co-operation by those laboring for improvement, in the efforts made both in this city and at Washington, to secure results. This is, however, largely a story of the past. The government engineer stationed at this port, who has in charge the dredging operations along the river, whose methods have been repeatedly criticised, has been sustained by a joint committee representing the principal trade and maritime bodies and the work will doubtless continue to be conducted along existing lines. The present depth of the Delaware Channel is twenty-eight feet. The law under which the government appropriations are being expended gives us thirty feet, which is five feet less than the plans for the channels connecting Boston and Baltimore with the ocean, and ten feet less than that enjoyed by the Port of New York.

The District Engineer estimates the cost of a thirty-five foot channel to the Port of Philadelphia to be \$11,000,000, with an annual main-



New Municipal Pier at Vine Street, Shore Front.

tenance of \$300,000. Philadelphia will continue to agitate for a channel of this depth, which is her due and will be required by the great commerce which will use the Delaware River in coming years.

The City of Philadelphia has appropriated, within three years, \$2,500,000 for Port improvements. The government appropriations for deeper channel work and maintenance average \$1,000,000 annually, but it is hoped that Congress will materially increase the amount in the future.

In the meantime both the City and the State are appropriating further money in order to prepare the port for its expected increase of ocean traffic. Five years ago the Department of Wharves, Docks and Ferries was created as a part of the city administration. Great changes have since been effected along the water front. A great deal of dredging has been done in and around the landing places of large ships upon both rivers. The channels leading to loading and discharge points have been deepened, unsightly old piers have been removed and splendid new piers have replaced them. All of these modern piers extend out to the port warden's line and several of them are double-decked, the upper floor being available as "recreation piers," a boon to the poor of the river-front wards. Delaware Avenue has been widened and bulkheaded in concrete. In 1910, the city bought a tract of land upon the west side of the Schuylkill River of four hundred and seven acres and offers double the space now utilized by the Bush Terminal in New York Harbor, which has six 1400-foot piers, 123 warehouses and 22 lines of track. This port still has fourteen miles of entirely unoccupied tide-water frontage. It is stated that the existing wharfage will accommodate thirty-five 600-foot ships and one hundred 400-foot ships. Plans now being worked out will utilize 1,015 acres and provide wharfage for one hundred and thirty-one 600-foot ships.

The city owns the splendid modern piers at the foot of Chestnut, Race and Vine Streets. The Chestnut Street pier yields a revenue of \$6,000.00 to the city. At the Race Street pier is located the city's high-pressure pumping plant for fire purposes. The Vine Street pier is 571 feet long and 166 feet wide, with a depth of water alongside of 35 feet. The superstructure is of concrete upon piling. The construction cost was \$321,000. Another fine pier is under construction at Dock Street.

The national government is especially interested in this port because its great navy yard at League Island is upon ground presented by the city.



New Municipal Pier at Vine Street.



The Bourse.

The Philadelphia Maritime Exchange

The *Maritime Exchange* was founded in 1875, "to acquire, preserve and disseminate all maritime and other business information and to do such other and lawful acts as will tend to promote and encourage the trade and commerce of the Port of Philadelphia." The Maritime Exchange maintains reporting stations at the Delaware Breakwater, Reedy Island, New Castle, Del., Thurlow, Pa., and Atlantic City. The exchange also maintains a branch office at Lewes, Del., which is connected by telephone with all the life-saving stations from Cape Henlopen to Cape Charles. This is the centre of the maritime activities of the port.

At its offices upon the main floor of the Bourse the Maritime Exchange is in telegraphic touch with its several reporting stations, thus providing prompt information to all interested in the movements of shipping to and from this port. This service is one of its most important duties. It also reports for public information all marine casualties in the vicinity of the capes of the Delaware River.



**Reporting Station of the Philadelphia Maritime Exchange,
Located upon the Breakwater, near Lewes, Del.**



Penn Treaty Park.

The lower signal station, built upon the Breakwater, receives by means of the International Signal Code the names of incoming ships and such other facts as are of service to owners. Instructions are given to ship captains by the same method. Storm and other weather signals are displayed. This station, as well as the one nearby, at Lewes, Del., have become of greatly increased value to the Port of Philadelphia since the Harbor of Refuge has been completed. The other stations mentioned report the progress of vessels passing up and down the Delaware River.

Local Freightage Facilities

The Pennsylvania Railroad Company has fifty-six freight stations in the city and in Camden, N. J. These are classified with reference to the destinations of goods. Many of these stations are directly upon the river front. A belt line railway extends along the Delaware river frontage from Washington Avenue northward to Port Richmond. At the latter point the extensive shipping piers and coal yards of the



Philadelphia & Reading Railway Freight Transfer and Coal Storage Yard, Port Richmond, Philadelphia.

Philadelphia & Reading Railway system extend half a mile. This company as well as the Baltimore & Ohio Railroad lines have several shipping points along both rivers. The navy yard tracks are connected with those of the Pennsylvania Railroad. The railroads provide siding conveniences for a multitude of important industries. The time is near at hand when perishable products from the surrounding country will be brought to the markets upon the electric railways of which many radiate from the city. There is, perhaps, no other city so well provided as Philadelphia, with means for carrying and markets for selling the table supplies of the population. Market baskets are handled between the central terminals and the suburbs and surrounding villages upon numerous local trains without charge to passengers.

Steamship Service

The following steamship lines maintain regular foreign service from this port:

To Europe

Austrian ports	Austro-Americana S. S. Co. .	437 Arch St.
Belgian ports	Red Star Line	405 Bourse
Denmark	Cosmopolitan Line	619 Lafayette Bldg.
"	Scandinavian-American Line.	619 Lafayette Bldg.
France (Havre)	Atlantic Transport Line	405 Bourse
Germany (Hamburg)	Hamburg-American Line	405 Bourse
Great Britain (Glasgow)	Allan Line	421 Chestnut St.
" " (Leith)	Cosmopolitan Line	Lafayette Bldg.
" " (Liverpool) ..	American Line	405 Bourse
" " (London)	Atlantic Transport Line	405 Bourse
" " (Manchester) ..	Phila.-Manchester Line	445 Bourse
Italy (Genoa and Naples)	Italia Line	455 Bourse
Netherlands (Rotterdam)	Holland-American Line	405 Bourse
Norway (Christiania)	Cosmopolitan Line	
" "	Scandinavian Line	619 Lafayette Bldg.
Newfoundland (St. Johns) ...	Allan Line	421 Chestnut St.
Panama	Panama R. R. S. S. Co.	437 Arch St.
Jamaica (Port Antonio)	American Mail S. S. Co.	Pier 5, N. Delaware Ave

Coastwise Lines

New York and Norfolk	Clyde Line
Baltimore	Ericsson Line
New Orleans and Charleston	Gulf Line
Providence, Fall River and Boston	Merchants' and Miners' Line
Savannah and Jacksonville	" " " "
Charleston, Port Tampa and Key West	Southern S. S. Line
Atlantic City	Atlantic City Line



Turret-Deck Steamer Loading Grain for Export, Girard Point Elevator, Schuylkill River.



Municipal Ice-Breaker "John Weaver."

The City Ice Boats

Although the winters in this latitude are brief, and severely cold weather the exception, the Delaware River is often covered with ice which necessitates the employment of large and powerful ice boats provided by the city. The duty of these boats is to keep the channel open and to assist vessels coming up the river or leaving port. Under ordinary winter conditions the existing fleet of ice boats is equal to the needs of navigation. Last winter the admirable service performed was recognized by the Maritime Exchange and the owners of vessels but it is the opinion of the Port authorities that another and more powerful boat should be built, and it will doubtless be done. It is also suggested that the channel traversing the "horse shoe" bend be widened to five hundred feet. This bend in the Delaware River just below the city has always been a source of trouble to navigators in the winter.

Training for Navigators

The Pennsylvania Nautical School was established upon April 17th, 1889, by authority of the legislature of the state, for the purpose of training pupils in the science and practice of navigation. To that end three directors were appointed by the Governor, and three by the Mayor of the city, in addition to which is a secretary. Under a Congressional Enactment the Directors soon afterward secured the



A Nautical School Class Aboard the U. S. S. "Adams."

U. S. Sloop of War Saratoga as a training ship. This vessel, having become unseaworthy, was replaced in 1908 by the U. S. cruiser "Adams," the latter having both sail and steam power. The instruction given to those who are enrolled is intended to fit them to become officers in the commercial marine. The methods of instruction are similar to those employed in the nautical schools of Boston and New York City. The school course covers two years and includes annual cruises to Europe and winter cruises to the West Indian ports. The officers are also instructors, and in their selection preference is given to graduates. The commander is usually a naval officer.

This school afloat is very attractive to boys of ambition and spirit and has developed many practical navigators now employed upon merchant ships in the American marine. The cost of maintaining the ship is borne jointly by the state and the city. All pupils are from within the state. Many of them come from the interior counties. The office of the Board of Directors is at No. 16 North Delaware Avenue, Philadelphia.

The only advance Naval Base School in the United States Naval Service has been established at the Philadelphia Navy Yard. This institution aims to instruct men of special ability in the marine corps in land and sea tactics, strategy, scouting, aerial reconnoissance,



Getting Ready for Target Practice, Philadelphia Navy Yard.

emergency engineering and similar problems of warfare. Aeroplane practice will be an interesting feature of class work in the near future.

The United States Navy Yard

The Philadelphia Navy Yard is destined to become one of the most important if not the principal of the naval stations. It is one of the four included in the plans of the Navy Department for development. Recently, a large barrack building for marines, and houses for marine officers, have been constructed here. The question of a new drydock is before Congress. Under an order of the Navy Department, this yard is to be the base of operations for the Atlantic Reserve fleet which includes twelve or more battleships, and probably of the Third Division of the Atlantic Fleet. Many of the lesser vessels of the navy will necessarily follow, and it has been estimated that a force of about 6,000 men will be found at all times at this point. The future visitor will doubtless find a visit to the Philadelphia Navy Yard both interesting and impressive.

The Navy Yard may be reached conveniently by electric cars down 12th or 15th streets.

Ship Building

The building of ships has been an important item of industry since the foundation of the city. It was encouraged by William Penn, and vessels of ample tonnage for the coasting and West India trades were launched here in the early years of the eighteenth century. Tra-



U. S. S. "Utah" in the Stone Drydock at Philadelphia Navy Yard.

dition locates the first shipyard at the foot of South Street. The old United States Navy Yard was located upon the site of the shipyard established at the foot of Federal Street by Joshua Humphries, long rated as the foremost naval architect of the country. It was here that he built, in 1797, the U. S. Frigate "United States." The navy yard,



1. A Battleship Launch at "Cramp's."

2. The Philadelphia Navy Yard.



At "Cramp's," the Birthplace of Sea Fighters.

established at this point, in 1800, was in operation seventy-five years. During much of that period it was the chief building and outfitting plant of the Navy Department. Many famous fighting ships took the water at the old yard, notably the ship of the line *North Carolina* (1820); the Frigate "*Pennsylvania*" (1837), the largest vessel built in any country up to that date; the "*Vandalia*," "*Dale*," "*Germantown*," "*Raritan*," "*Wabash*," "*Lancaster*," "*Mississippi*" and "*Susquehanna*," all destined to have a part in the naval history of the country. Here also was built the "*Princeton*," fastest ship of her time, famous in the annals of Arctic exploration.

The opening of the Civil War gave the Philadelphia Navy Yard a great impetus. During the war period many naval craft were constructed by the army of mechanics employed here. One of these, the frigate "*Tuscarora*," launched upon April 24th, 1861, was built in fifty-eight working days. The requirements of war also gave private builders abundant work. Gunboats and transports were turned out at the establishments of Simpson & Neill, Hillman & Streeter, John W. Linn, Jacob Bireley; Bireley, Hillman & Co., Neafie & Levy and William Cramp & Sons. At the yard of the latter firm the "*New Ironsides*" was created a fighting monster, completed, armed and in service eleven months after work was commenced, and destined to pass unscathed through twenty battles. This was the first of the great iron-clads in the American navy. A large proportion of the splendid war vessels now in active service of the United States took the water at this historic yard.



Vessels of War and Commerce, New York Ship-Building Co., Camden, N. J.



A Launching Day at "Cramp's."

With the advent of iron construction, nearly all of the old builders of clipper ships, known in every port of the commercial world, were gradually forced out of business. The most notable exception was that of William Cramp & Sons. This famous establishment was founded in 1830. In 1872 the firm incorporated under the title of "The William Cramp & Sons Ship and Engine Building Company. Upon the death of the founder, Mr. William Cramp, in 1879, his eldest son, Charles H. Cramp, became President. The plant of the J. P. Morris Company, which dated from 1828, was added to that of the Cramps and in 1900 the property of the Kensington Ship Yard Company (originally the Charles Hillman & Sons Ship Building and Engine Company) was also bought. The present corporation not only builds and repairs ships, as of old, but conducts an extensive brass foundry plant.

The ships built by the "Cramps" during the eighty-two years of the concern's existence number to date 388. Many of these are ships of war constructed for not only the United States but for many foreign governments. At the present time there are under construction at this plant for the United States navy one battleship, the "Wyoming," five torpedo boat destroyers, and one submarine; for the Cuban government, one gunboat and one cruiser. A considerable force is always kept busy on merchant shipwork.

The employees at the present time on the payroll number 4,444



A Building-Slip at the Plant of the New York Ship-Building Co., Camden, N. J.



The Raritan River and Canal.

Camden's greatest plant is that of the New York Ship Building Company, established in 1898. From this extensive establishment have been launched a number of "Dreadnought" battleships, among them the monster "Utah," now in commission, and the "Moreno," built for the Argentine Navy. These are the world's greatest ships of war. Other Government ships built here are the battleships "Kansas," "New Hampshire," "Michigan," "Utah," and "Arkansas," and the Destroyers "Preston," "McCall," "Burrows," "Ammen," "Jarvis," and "Downes." Since its foundation this yard has constructed more than 125 vessels of all kinds.

The Atlantic Deeper Waterways Association

Two distinct inland waterway movements are at this time before the country; one of these interests the states upon and near the Atlantic Seaboard, and the other the cities and regions within the watershed of the Missouri, the Mississippi and the Ohio rivers. Broadly considered, both interest the entire nation, as the developments proposed must tend to facilitate the carrying of and therefore cheapen commodities originating in every section. No state will enjoy more of the prospective gain resulting from a realization of the



The Old Delaware and Chesapeake Route.

plans proposed than Pennsylvania. Sporadic efforts have been made for a long time to induce the appropriation of Federal money for the improvement and continuity of the canals already connecting tide-waters between New York harbor and Florida. To work more effectively for this end the Atlantic Deeper Waterways Association was organized in November, 1907, and a year later its first annual convention was held at Baltimore. Delegates representing sixteen states attended the sessions. A large number of commercial bodies were also represented as well as the Mississippi and Atlantic Waterways Association, National Rivers and Harbors Congress and National Drainage Association.

The plans considered at this convention include a continuous channel from Boston to the southern extreme of Florida, of sufficient width and depth to serve the purposes of both commerce and National defense. Those actively interested in the initial convention very wisely elected as president, the Hon. J. Hampton Moore, M. C., of Philadelphia, who has long been a persistent and able advocate of the great undertaking to which the Atlantic Deeper Waterways Association is committed.



An Example of the Obsolete Type of Canal Lock, Limiting Traffic.

One vice-president and one delegate were elected from each of the states interested, and the late Addison B. Burk, a veteran Philadelphia journalist, became secretary-treasurer.

The physical work involved may be summarized as follows:

1. A canal across Cape Cod, between Buzzard's and Barnstable Bays, length 7.5 miles. This long-needed channel will save to mariners 148 miles of especially dangerous navigation.
2. The construction of a new sea level canal across the state of New Jersey, a length of 31.4 miles.
3. The creation of a new and adequate canal between the Delaware River and Chesapeake Bay.
4. The route between Norfolk through the sounds and streams of North Carolina to Beaufort Inlet, North Carolina.
5. The route from Beaufort Inlet via Wilmington, N. C., to Winyah Bay, South Carolina.
6. The development of natural waterways between Winyah Bay and Jacksonville, Florida.
7. The further improvement of existing canals along the Florida coast a distance of 350 miles, which have been created by the Florida Coast Line and Construction Company.



Walnut Street Bridge.

The City of Philadelphia

Philadelphia is two hundred and thirty-one years old, and has a population of nearly one million six hundred thousand. The three counties of the State adjoining the city have 500,000 residents. The borders of the city and the county of Philadelphia are identical. This area includes one hundred and twenty-nine square miles of land beautifully diversified in character. From an elevation but a few feet above tide-water in its southern section the surface rises to four hundred feet at its northern extreme. The city has a frontage upon the Delaware River of twenty miles, and within corporate limits the Schuylkill River courses fourteen miles to its junction with the larger stream, at the United States Navy Yard upon League Island. Broad Street, with its suburban extension called York Road, traverses the centre of the older portions of the city northward from League Island twelve miles. Market Street crosses the city from the Delaware River, six miles westward to its border upon Mill Creek. Large spaces are still available around the southern portion of the Schuylkill River, and in the districts of Bridesburg and Tacony upon the Delaware River above the city proper, for industrial plants upon tide-water. The spread of population is most largely westward, the great residential section beyond the Schuylkill now containing more than a fourth of the city's people. Seventeen bridges for local or railroad travel span the Schuylkill River and one (Pennsylvania Railroad) crosses the Delaware to New Jersey. Transit between Philadelphia and the opposite city of Camden, New Jersey, is by means of a series of ferries. This will be superseded, it is expected, within a few years by tunnel service under the river.



The Beautiful Wissahickon Valley, Spanned by a Lofty Concrete Viaduct, is within the City Limits.



U. S. Post Office Building.

The plan of Penn's old city, which comprises the business, hotel and older residential sections, is severely rectangular, but in the suburban districts the streets are surveyed in many complex groupings of angles.

The tracks of three railroad systems extend into the centre of the city to large passenger stations. Two of these approaches are upon elevated trackage and one below grade. Local trains for suburban service are operated by each of these lines. A great net-work of freightage tracks is spread across the city, each system having costly terminal facilities upon the two rivers. Philadelphia has considerably more than twelve hundred miles of paved streets, the paving being nearly all of modern types. In addition there are more than three hundred and fifty miles of macadamized suburban roads. Beyond the city limits and around the town to the west, north and northeast are scores of beautiful villages and countless private estates set in the midst of woodlands and lawns, the whole forming the most picturesque



Along Delaware Avenue, North from Market Street.



Market Street Terminal, Philadelphia & Reading Railway.

and spacious environment possessed by any American city. It is doubtful if any other section of the country affords so much charm of varied scenery within speedy reach from a great city, or so many miles of superb roads winding through beautiful rural estates.

Within a circle of ten miles having the City Hall for its centre, there is a population exceeding two millions. More than one-half of the people outside of the corporate borders of Philadelphia, but within the limit defined, are supported by employment in the city.

The City Streets

The streets north and south are numbered westward from the Delaware River from Second Street to Sixty-third Street. Broad Street takes the place of Fourteenth Street, this number being omitted. The house numbers upon these streets are enumerated northward and southward from Market Street. The east and west streets were named by William Penn after native trees. Each block in either direction is numbered by hundreds, corresponding with the number of the street intersected.



Broad Street View from Church Street



U. S. Custom House and the Drexel Building.

South of Market Street

House No.	Name of Street.	House No.	Name of Street.
1	Market	1400	Reed
100	Chestnut	1500	Dickinson
200	Walnut	1600	Tasker
300	Spruce	1700	Morris
400	Pine	1800	Moore
500	Lombard	1900	Mifflin
600	South	2000	McKean
700	Bainbridge	2100	Snyder Avenue
740	Fitzwater	2200	Jackson
800	Catharine	2300	Wolf
900	Christian	2400	Ritner
1000	Carpenter	2500	Porter
1100	Washington Avenue	2600	Shunk
1200	Federal	2700	Oregon Avenue
1300	Wharton	2800	Johnson



An Electric Train of the Philadelphia & Western Railway.

Local Transit

Large numbers of persons engaged in regular avocations in the business and manufacturing districts are constantly removing to sections more distant from the point of employment, and one of the most serious problems of the municipality is the provision of sufficient transit facilities to carry them back and forth. The street car system is controlled by the Philadelphia Rapid Transit Company. The city is represented upon its Board of Directors. The rate of fare is five cents, for which in some directions, a passenger may travel a dozen miles. There is also a system of free transfers to intersecting lines and exchanges (at eight cents) upon others. The operating company has a trackage of about six hundred miles, and carries an average of one million one hundred thousand people per diem. A subway system is in operation beneath Market street from the Delaware to the Schuylkill Rivers beyond which the tracks are elevated to the city line. The city authorities are now planning for a four-track subway northward beneath Broad Street, and a series of lateral elevated lines reaching densely populated outlying districts. The old cars are being replaced by those of the most modern design and of larger capacity.

From terminal points of the Rapid Transit system a number of electric railway lines extend outward to tributary villages and towns. These greatly assist in the development of the picturesque environment of the city.

More street cars are made in Philadelphia, at the great establishment of the J. G. Brill Co., than anywhere else in America. Cars of the most improved design are constantly sent from Philadelphia to not only many other cities of the United States but to those of other lands. This city is, however, still lacking in modern transit equipment



In the Residential Section, West Philadelphia.



Pennsylvania Railroad Terminal.

Homes for Everybody

Within the city limits there are nearly 340,000 separate and distinct residences. These increase in number about 9,000 annually. Less than 13,000 of these buildings are of frame construction. By far the greater number of them are of two floors and basement, and those erected in the newer extensions of the city contain conveniences quite unknown excepting by the wealthy, a few years ago. Such houses rent at from \$25.00 to \$35.00 per month. A fashion exists in Philadelphia, amounting almost to a passion, for ownership. More houses are owned in this city by their occupants than in any other large city in the world. This spirit is encouraged by the system of building associations, of which there are more than six hundred. Through these the cost of a property is paid in monthly instalments as return upon the money borrowed and the shares generally mature in about eleven and a half years. Large employers are, in some instances, interested in improving home buildings in the vicinity of their establishments. The average size of the Philadelphia family is 5.10, which exceeds the average of the entire country by three per cent., and is above that of any other city. This



Typical Homes in West Philadelphia.

condition is due to the higher sanitary conditions existing here, and to an orderly habit of family life resulting from ownership. The mortality rate (16.50 per 1000) is below that of other great cities. Philadelphia contains more than 350,000 bath-rooms. There are also twenty public bathing houses, located generally in the poorer sections. Small parks and playgrounds are numerous and constantly increasing. Concerts by the Municipal Band take place in the minor parks afternoon and evenings through the summer.



Memorial Hall, Fairmount Park—Large Collection of Art Objects.

Fairmount Park

The city's chief recreation ground is, however, beautiful Fairmount Park, a grand domain of more than three thousand acres easily accessible from any part of the city. Through its more remote sections the peerless Wissahickon Creek wanders down a deep and forest-clad ravine to its entry into the Schuylkill River, which traverses and divides the Park for a distance of six miles. Numbers of well-preserved Colonial homesteads are situated within the Park. Memorial Hall containing a valuable collection of art objects, and Horticultural Hall



The American Henley, Fairmount Park.

the pride of florists, remain to remind present and future generation of the great Centennial Exhibition of 1876. An electric railway connecting with the city transit system at several points, affords a speedy means of touring the Park. A diagonal boulevard extending northwest from the City Hall one mile is in course of construction, and will connect the centre of the city with the Park. This broad diagonal approach will be, in time, embellished with a series of noble building



Old Fairmount Water-Works, now City Aquarium.

devoted to education, art and science. Adjoining the Park is the Zoological Garden, containing a large collection of interesting animal and birds. A City Aquarium has been opened at the old Fairmount Water Works. Upon the elevation seen behind the buildings displacing the old reservoir will be erected the proposed Municipal Art Gallery facing the broad parkway toward the City Hall. This point is the entrance to the eastern section of Fairmount Park. Numerous boat clubs are located above the dam, and the frequent regattas of the rowing crews over the beautiful course above Columbia bridge, known as the "American Henley," affords an ever-popular spectacle for thousands who throng to the park. Many of the important national aquatic events are held here.



City Hall.



Building of the Girard Trust Company.



Independence Square.



Club House of the Union League of Philadelphia.

Hotel and club life is at its best in Philadelphia. The "Continental," last of the old-time hostelries of the city, is still catering successfully to its many patrons. The newer hotels are upon and near Broad Street and in that section south of Chestnut Street are the larger and more exclusive clubs. There are numbers of great department stores which are little cities in themselves, and within which the visitor will find uniformly courteous attention upon the part of the employees.

There are few vistas in an American city more impressive, not only in architectural effect but in the stir of multitudes and the thronging of automobiles, than the scene looking toward the City Hall from Locust street. This is the heart of the city, and around it are gathering many of the interests which thrive best where the tide of life flows swiftest. The hotels, clubs, restaurants, florists, theatres and office buildings combine at this point in a picture of the present day, leaving to the quiet purlieus of Locust street and its repositories of history the study of the past.



Library of the Historical Society of Pennsylvania.

It is to these quiet libraries, just around the corner from Vane Fair, that the student turns for mental relaxation. The building of the Library Company of Philadelphia is at Locust and Juniper street; that of the Historical Society of Pennsylvania at Locust and Thirteenth streets, and the central building of the Free Library system just across the corner.

There is, perhaps, no other city in the country within which much serious effort is made to provide young people with healthful mental diversions in their spare hours. Public libraries and reading rooms are numerous, and free lectures and concerts are constantly held through the greater part of the year. Open-air music is provided in the city squares and Fairmount Park. Special services for students are held upon Sunday nights at the Garrick Theatre, and upon Sunday afternoons, through the summer, there are effective religious services in the Park.



Ridgeway Branch of the Philadelphia Library.



Dormitory Quadrangle, University of Pennsylvania.

Philadelphia is essentially a college city, and at its various seats of learning there are always in attendance thousands of young men and women, many of them from far away countries, engaged in the study of science, law, surgery, medicine, dentistry, engineering, architecture, art and other branches. For these increased housing is being provided. The beautiful Dormitory buildings of the University of Pennsylvania, now covering several blocks, are not surpassed by any in the world.

The Young Men's Christian Association and that for young women are housed in fine buildings, which are practically both clubs and homes for a large number of youths busy at their occupations during the day. If a boy or girl, thrown upon personal resources, in this city, "goes wrong," it is not for want of the always extended helping hand. Many of the largest employers are active in surrounding the lives of their work people with incentive to do their best in the struggle for success.

It is a part of the creed of the Philadelphia man and woman to assist when occasion offers, in imparting to the casual sojourner a favorable impression of the great, busy city of "Brotherly Love."



Annual New Year's Parade of the Costumed "Mummers" Clubs.

Hotels, Clubs and Theaters

The following are the principal hotels of the city:

		Per day and upward.
Aldine Hotel	1914 Chestnut St.	E \$2.00
		A 4.00
Bartram, The	33rd and Chestnut Sts.	
Bellevue-Stratford Hotel	Broad and Walnut Sts.	" 2.00
Bingham (New)	11th and Market Sts.	" 1.50
Colonnade Hotel	15th and Chestnut Sts.	" 1.50
Continental Hotel	9th and Chestnut Sts.	E 1.00
		A 4.00
Dooner's Hotel (For Men Only)	10th, North of Chestnut St.	E 1.00
Green's Hotel	8th and Chestnut Sts.	" 1.00
Guy's Hotel	7th, North of Chestnut St.	
New Hotel Hanover	12th and Arch Sts.	
Keystone Hotel	1524-42 Market St.	" .75
Lorraine	Broad and Fairmount Ave.	
Hotel Majestic	Broad and Girard Ave.	" 2.00
Normandie	36th and Chestnut Sts.	A 3.50
Rittenhouse Hotel	22nd and Chestnut Sts.	E 1.50
St. James	13th and Walnut Sts.	" 2.00
Hotel Walton	Broad and Locust Sts.	" 1.50
Windsor Hotel	Filbert, West of 12th St.	" 1.00
		A 2.50

Numerous other Hotels, Restaurants, Apartment and Boarding Houses, with rates ranging from \$.50 a day up, are located in different parts of the city and furnish good accommodations for those desiring cheaper rates.

Strangers arriving at either of the railroad terminal stations will find officials in waiting to answer questions and direct such visitors to any section of the city.



Masonic Temple.



**Quaint home of the Philadelphia Sketch Club
The Oldest Art Club in America.
Other Clubs shown beyond.**

Club Directory

A partial list of prominent Social and Industrial Clubs.
For other clubs not listed here, see Philadelphia City Direct

Acorn	1618 Walnut St.
Art, of Philadelphia	220 S. Broad St.
Athletic, of Philadelphia	1626 Arch St.
Automobile, of Philadelphia	1409 Walnut St.
Bachelor's Barge	Fairmount Park
Bala Golf	Conshohocken Ave. bel. City Line
Building Trades	24 S. 7th St.
Business and Professional Men's....	1232 Chancellor St.
Catholic	1403 Locust St.
Church, Protestant Episcopal	12th and Walnut Sts.
City	1418 Walnut St.
Clover, Hotel Bellevue-Stratford....	Broad and Walnut Sts.
College Club	202 Fuller Bldg.
Cornell	109 S. Juniper St.
Drug, of Philadelphia	512 Arch St.
Engineer's	1317 Spruce St.
Five O'Clock, Bellevue-Stratford ...	Broad and Walnut Sts.
Florists, Horticultural Hall	Broad St., South of Locust St.
Franklin Inn	Camac St. below Walnut St.
Frankford Country	Oxford Rd. near Leiper, Fkd.
Germania Maennerchor	1014 Devereaux. Lawndale



**In the Office Building Section,
North American Building in Foreground, City Hall in the Distance.**



Mercantile Club.

Germantown Cricket	Manheim near Morris, Gmtn.
International League of Press Clubs..	1024 Walnut St.
Jewelers'	1228 Chestnut St.
Lawyers', of Philadelphia	1507 Walnut St.
Manufacturers of Philadelphia	Broad and Walnut Sts.
Mask and Wig of U. of P.	310 Quince St.
Mercantile	1422 N. Broad St.
Merion Cricket	Haverford, Pa.
New Century	124 S. 12th St.
Pen and Pencil	1026 Walnut St.
Philadelphia	1301 Walnut St.
Philadelphia Cricket	Wissahickon Heights
Philadelphia Sketch	Camac St. below Locust St.
Philadelphia Turf	1421 Walnut St.
Philopatrian	1411 Arch St.
Poor Richard	239 S. Camac St.
Princeton	114 S. 15th St.
Quaker City Motor	Hotel Walton
Racquet Club	6th below Walnut St.
Rittenhouse	1811 Walnut St.
Sons of Delaware	600 Betz Building
Southern of Philadelphia	1810 Chestnut St.
Undine Barge, of Philadelphia	Fairmount Park
Union League	Broad and Sansom Sts.
University	1510 Walnut St.



Building of the Real Estate Trust Company.



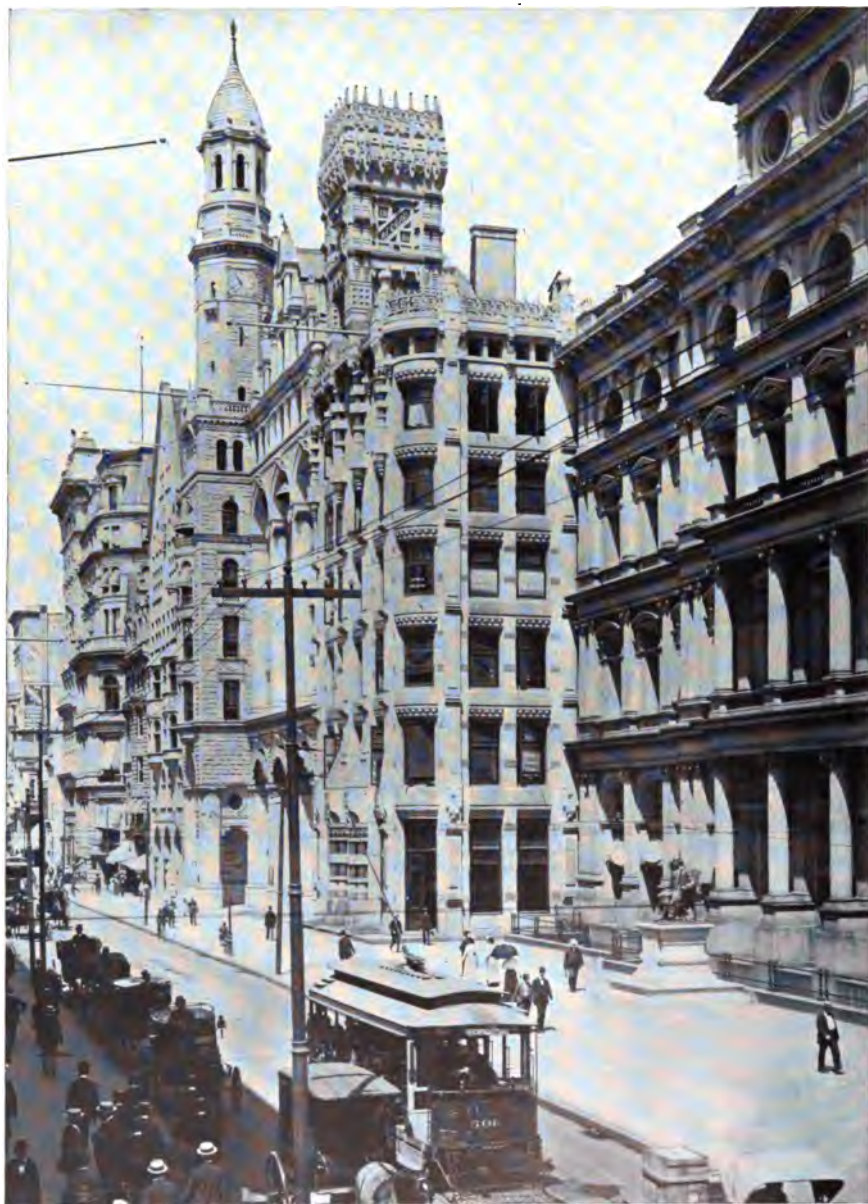
Academy of Music

Amusements

The places of amusement most centrally located are the Academy of Music, Adelphi Theatre, Broad Street Theatre, Chestnut Street Theatre, Chestnut Street Opera House, Keith's (Vaudeville), Lyric Theatre, Forrest Theatre, and Walnut Street Theatre; the latter is the oldest theatre in America. The sumptuous Metropolitan Opera House is located uptown on Broad Street. In the summer season a number of extensive suburban "parks" provide high-class music and varied attractions to multitudes of people.

Foreign visitors will find much entertainment in our distinctive national game of base ball, which is seen at its best at either of our great arenas devoted to that ever popular sport. The Philadelphia Base Ball Park is at Broad and Huntingdon Streets and that of the Champion Athletics at Twenty-first Street and Lehigh Avenue. The numerous sports of the University of Pennsylvania are held at Franklin Field, one of the greatest of American athletic centres. It adjoins the group of University buildings in West Philadelphia and is near the Commercial Museum.

This arena is the scene of the annual athletic events in which representative teams from colleges in many states compete. Here also the West Point Cadets and "Middies" of the Naval Academy decide the great foot ball contest of the year.



Chestnut Street West from Ninth Street.



Baltimore & Ohio Railway Station.

Taxicab Tariffs

(Company reserves right to change tariff without notice)

(For one to four persons)

First half mile, or fraction thereof30 cents

Each quarter mile thereafter10 cents

Each six minutes of waiting10 cents

Extras

For each package or small trunk carried outside, 20 cents.

Cabs will be promptly dispatched, day or night, on call by telephone to an address within half a mile of station, free of charge, but where distance is over half a mile, charge of 20 cents for each additional mile or fraction thereof will be made. When cab is dismissed at any point over three miles from City Hall, passenger must pay for return service at 20 cents a mile for every mile or fraction thereof above three miles. Ferriage and tolls must be paid by passenger.

Autos for private use may be engaged, with competent chauffeur from any one of a number of garages. This provides the most agreeable means for seeing the Park and suburbs.









This dignified old structure has been in turn the home of a number of business associations. It is at present occupied by the Stock Exchange, which will soon remove to its new building upon Walnut Street above Broad Street.



Board Room, Chamber of Commerce, Bourse Building.

Leading Business Organizations

The Chamber of Commerce (formerly the Trades League of Philadelphia), organized in 1891, to promote the business interests of the city. Offices, Bourse, Fifth Street entrance. Open every business day.

Board of Trade, organized in 1833, incorporated in 1838, devoted to the advancement of the material prosperity of the community, the membership representing every department of industry working along practical lines for the common good. Offices, Bourse.

The Commercial Exchange, organized in 1854, as the "Corn Exchange Association." Chiefly devoted to the interests of its members identified with domestic and export handling of grain, flour, provisions and general produce. Main floor, Bourse.

The Stock Exchange, the trading centre in securities. Third and Walnut Streets. This organization will soon remove to its new building upon Walnut Street west of Broad Street.

Merchants' and Manufacturers' Association. This active organization was created not only to promote the manufacturing and selling inter-



Master Builders' Exchange

ests of the city and to bring men together who are active in the business affairs of to-day, but also to adjust matters of freighting and other details in the handling of goods and thus relieve the individual members of many annoying details. The rooms of the Association are at the northeast corner of 13th and Market Streets and are open every week day, and the casual visitor is sure of a welcome at the hands of the secretary.

The Master Builders' Exchange, organized 1887. This influential association occupies a spacious building at 18 to 24 South 7th Street. The main floor contains a permanent exhibition of everything used in the building trades. Many concerns allied with building interests have offices here. Upon the second floor are a large assembly room and committee rooms. The membership includes practically all of the builders and supply concerns of the city. This is the oldest exchange



Exchange Room, Master Builders' Exchange.

in the country, and has been the model for similar bodies in other cities, and was influential in the formation of the National Association of Builders' Exchanges. Open every week day.

In 1911 there were 16,215 building operations in Philadelphia, costing \$40,030,985.00—these included:

7,633 two-story houses costing	\$15,959,075.00
965 three-story houses costing	4,505,965.00
3 four-story houses costing	56,500.00
Alterations and additions to existing properties, 6,127 ..	9,294,810.00
66 manufacturing plants built costing	2,873,535.00
47 workshops costing	61,155.00
46 stores costing	187,625.00
30 warehouses costing	879,650.00
40 flat houses costing	1,048,200.00

The rest made up in minor operations.



Disston Saw Works, Tacony, Philadelphia.

Joint Executive Committee on the Improvement of the Harbor of Philadelphia and the Delaware and Schuylkill Rivers

At a meeting of the Philadelphia Board of Trade held January 17th, 1887, a Preamble and Resolutions were adopted authorizing the appointment of a Committee to take into consideration the feasibility of the removal of Smith's and Windmill Islands and adjacent shoals with request to confer with committees of the Commercial and Maritime Exchanges and such other organizations as might be deemed advisable.

The situation of these islands in front of the City and the narrowness of the channel between them and the ends of the pier made the further extension of the wharves into the River a physical impossibility.

The Harbor Commission (then in existence), under the report of its Advisory Board, had declared the extension of what was then known as the Port Wardens' Line as unwise and dangerous.

The initiative in this movement taken by the Board of Trade met with popular support and secured the hearty indorsement of the Commercial and Maritime Exchanges.



Arcade Building.



An Old Down-town Street.

Prompt action was at once taken, and a Joint Memorial prepared and transmitted to Congress asking for the passage of a Resolution "under which inquiry shall be made as to the feasibility of removing Smith's and Windmill Islands and the Shoals adjacent thereto."

Through the instrumentality of our Representatives the River and Harbor Bill was amended in the Senate, by the insertion of a clause authorizing the Secretary of War to appoint a Board of Engineers "to examine and survey the Delaware River in front of Philadelphia with a view of removing Smith's and Windmill Islands, together with adjacent Shoals, and to report with the estimate of cost and necessity for such improvement in the interest of navigation."

The failure of the Bill, at that Session, to become law prevented the appointment of the Board of Engineers.

The Bill of August 11th, 1888, however, after a report had been received from the Board of Engineers appointed by Resolution of Congress February 17th, 1888, appropriated \$500,000 for the improvement of the harbor by the removal of the Islands named and also a part of Petty's Island.

Following this legislation the Board of Trade Committee called a joint meeting of the trade and commercial associations of the City,



**The Pennsylvania Railroad Bridge Across the Delaware River
Seashore Service.**

which was held October 17th, 1888, and at which was formed the Joint Executive Committee.

From that time until the completion of the work in the harbor, the widening of Delaware Avenue and the building of a new bulk-head, the Joint Committee fully and successfully represented the commercial and maritime interests, and advocated and secured the necessary legislation by the City and State to bring to a successful issue this great improvement.

While busily engaged upon the particular work which originally brought it into existence, it has taken the deepest interest in securing the improvement of the channels of the Delaware and Schuylkill Rivers, co-operating and working in harmony with the officials of the Government to that end.

At present the following associations are represented on the Committee: Philadelphia Board of Trade, Philadelphia Commercial Exchange, Philadelphia Maritime Exchange, Philadelphia Drug Exchange, Grocers' and Importers' Exchange, Philadelphia Chamber of Commerce, Philadelphia Bourse, Vessel Owners' and Captains' Association, Manufacturers' Club, Lumbermen's Exchange, Master Builders' Exchange.

The officers being: Geo. E. Bartol, Chairman; W. F. Hagar, Vice-Chairman; Henry A. Fry, Treasurer; W. R. Tucker, Secretary.

The rooms of the Board of Trade are in the Bourse, Fourth street end of the building.



Independence Hall.

Buildings and Places of Historical Interest

Independence Hall, the fountain-head of our national freedom, is the one patriotic shrine visited by every stranger who comes to the city with an hour to spare from business. The venerable building, with its flanking structures, fronts upon Chestnut Street, from Fifth to Sixth Streets. Through its arcades are glimpses of Independence Square. The Colonial apartment, with its original furniture, wherein the Declaration of Independence was signed, is to the left upon entering; the Supreme Court room is opposite. A large collection of portraits is



The Signers' Room, Independence Hall.



Carpenters' Hall, Meeting Place of the First Continental Congress, 1774.

upon the second floor. The Liberty Bell is in the corridor. Museums of Revolutionary and Colonial relics occupy the flanking buildings. The building at the corner of Sixth and Chestnut Streets, a part of the group, was the Capitol of the United States during the ten years from 1790 to 1800. This structure is now undergoing restorative changes. Independence Hall is open every week day. It is more largely visited than any other place in the city.



Christ Church, Colonial.



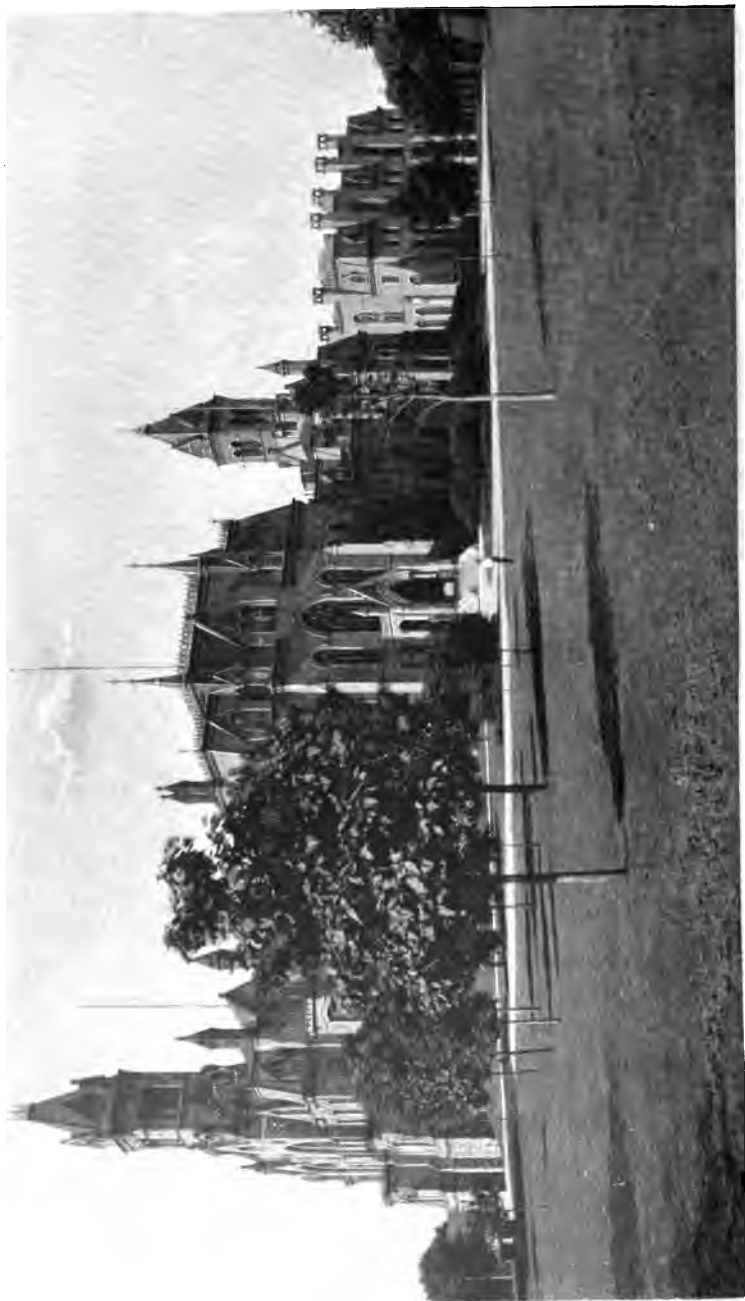
Washington's Headquarters at Valley Forge.

Carpenter's Hall, two blocks eastward from Independence Hall, owned by the ancient guild of the Carpenters' Company, was the scene of the deliberations of the first Continental Congress in 1774. This quaint little building, hidden away among modern structures, is much visited. Open from 1 to 3 p. m. week days.

Christ Church, upon Second Street above Market Street, and *Gloria Dei (Old Swedes') Church*, upon Swanson Street near Washington Avenue, are treasured because of their historic and Colonial associations. Open week days excepting Saturdays from 9 a. m. to 3 p. m.

The Flag House, where, according to tradition, Betsy Ross made the first American flag, is at 229 Arch Street, and the *Grave of Benjamin Franklin* is two blocks westward at the corner of Fifth Street. The *House of William Penn* is in Fairmount Park, just west from Girard Avenue bridge. This typical residence of the Colonial period was removed to its present site about twenty years ago from Letitia street, near the Delaware river. It may be seen from passing railroad trains.

The *Penn Treaty Monument*, in the small park of the same name, is close to the Delaware River in the upper part of the city. It marks the site of the historic elm, beneath which William Penn is said to have treated with the Indians, who were the original inhabitants.



Buildings forming part of the group of the University of Pennsylvania in West Philadelphia.



The Pennsylvania Academy of the Fine Arts.

The United States Mint

This is the most costly and interesting of the Federal institutions in the city. It is located at Seventeenth and Spring Garden Streets and is the largest mint in the country. It produces two-thirds of our entire coinage. Visitors generally find the processes of "making money" here, as well as the large numismatic collection, very instructive. Open week days 9 a. m. to 3 p. m.

Science, Art and History

The American Philosophical Society, which continues to occupy the venerable home upon the eastern side of Independence Square, is well along in its second century of usefulness. It was founded by our great and gifted citizen, Benjamin Franklin, in 1743, and has continued in its present building one hundred and twenty-one years. Its comprehensive library is a record of the advance made in all scientific knowledge in modern times. Many portraits and interesting mechanical models are in its rooms. Open daily between 10 a. m. and 1 p. m.



United States Mint.



Franklin Institute.

The Franklin Institute, founded in 1824, for the encouragement of the mechanical arts, has, also, its time-honored edifice at 15 South Seventh Street. Its membership is composed of progressive manufacturers, inventors and mechanics. A large and valuable reference library and its lecture courses are free to the public. Open daily excepting Sundays.

The Academy of Natural Sciences. This important institution was founded in 1812, for the object of original research in natural history. Its publications cover the fields of discovery and natural science, and its immense museum of mounted specimens is largely visited. Lectures, free to the public, are maintained throughout the greater part of the year. Buildings at Nineteenth and Race Streets. This Society has recently celebrated the centennial of its formation. Open week days from 9 a. m. to 5 p. m., Sundays 1 to 5 p. m.

The Wagner Free Institute was founded by Prof. William Wagner in 1859, for the popular study of geology, mineralogy, chemistry, physics and engineering. It has an extensive Natural History Museum, a comprehensive library, and provides lectures in the season. Open Wednesdays and Saturdays from 3 to 5 P. M. Seventeenth Street and Montgomery Avenue.



Philadelphia Library.

The Museum of Science and Art, of the University of Pennsylvania. The beautiful buildings which house a priceless collection of ancient and modern objects, are upon Spruce Street near 34th Street. Much of the exploration undertaken in Babylonia and in Biblical countries generally has its origin here. Open daily. Sundays after 1 p. m.

The Philadelphia Library, conducted by the Library Company of Philadelphia. Located upon Locust Street east of Broad Street. The same corporation, which was founded by Benjamin Franklin and his friends in 1731, also maintains the Ridgway Branch Library at Broad and Christian Streets. The latter library is housed in a splendid Greek building in the centre of open grounds. Both libraries are repositories of a wealth of knowledge of constant use to scholars.

The Mercantile Library, conducted by a corporation founded by merchants in 1821, is a popular institution centrally located upon Tenth Street north of Chestnut Street. Like the other corporate libraries, it is free to the public and is open daily.

The Free Library System of Philadelphia is a part of the city administration. The central building and offices are at Thirteenth and



Mercantile Library

Locust Streets. Its numerous branches are scattered all over the city. The librarian is in charge of the Carnegie Library Endowment in Philadelphia, under which thirty elaborate and convenient buildings are provided. Fifteen of these are already in use and are largely resorted to by the public.

The average cost of these buildings is \$50,000. The city provides the ground and supplies books and attendance.

The Pennsylvania Academy of the Fine Arts, the oldest art institution in America, celebrated the end of its first century in 1905. It has always occupied a position of leader in the development of art in America. From its classes have been graduated a large proportion of men and women foremost in the fields of sculpture, painting and illustration. The galleries of the Academy, upon Broad Street above Arch Street, contain a large collection of notable works of art. The frequent exhibitions of oil and water color paintings as well as of works in black and white attract national attention. Open daily, including Sunday afternoons.

The Pennsylvania Museum and School of Industrial Art, now in its thirty-sixth year, was established to provide instruction in the



Drexel Institute.

applied arts. Its teaching is distinctly industrial. Its schools occupy a large old-fashioned building at Broad and Pine Streets. The dignified Memorial Hall, originally the Art Gallery of the Centennial Exhibition, contains its valuable collection of carvings, textiles, ceramics, curios and paintings. This collection is open every day including Sundays (after 1 p. m.)

The Drexel Institute, supported by endowment from the estate of the late A. J. Drexel, is also devoted to instruction in a wide variety of industries. It also has interesting collections of art objects and paintings. Lectures and concerts, free to the public, are special features. Open every week day.

The Historical Society of Pennsylvania.—Within recent years the invaluable library, manuscripts, pamphlets and paintings collected during the many years of its existence, by the Society, have been placed in a spacious new fire-proof building, safe, as human foresight can provide, against all possibility of destruction. The original Charter of the City of Philadelphia, the first deed of the Indians to William Penn and the manuscript of the original laws agreed upon, in 1682, by the first English colonists of the Province, are notable among the priceless documents preserved here.



Native Weaver, Philippine Islands, Commercial Museum.

The Commercial Museum

The Philadelphia Museums, more generally known by the title of *Commercial Museum*, were created by the city in 1894 in order to increase the interest in and knowledge of the raw materials and finished products of other lands and to thereby foster foreign trade, both in imports and exports. The nucleus of this permanent collection was brought from the Columbian Exposition in Chicago through the effort of Dr. W. P. Wilson, who has been, since its formation, its Director. Large and valuable exhibits have been since secured from the Paris Exposition of 1900, the Pan-American Exposition of 1901 and the Louisiana Purchase Exposition of 1904. Many foreign governments have augmented their exhibits in order to be thoroughly well represented. Dr. Wilson, as chairman of the Philippine Government Board, which made the Philippine Exhibit at the St. Louis Exposition, was

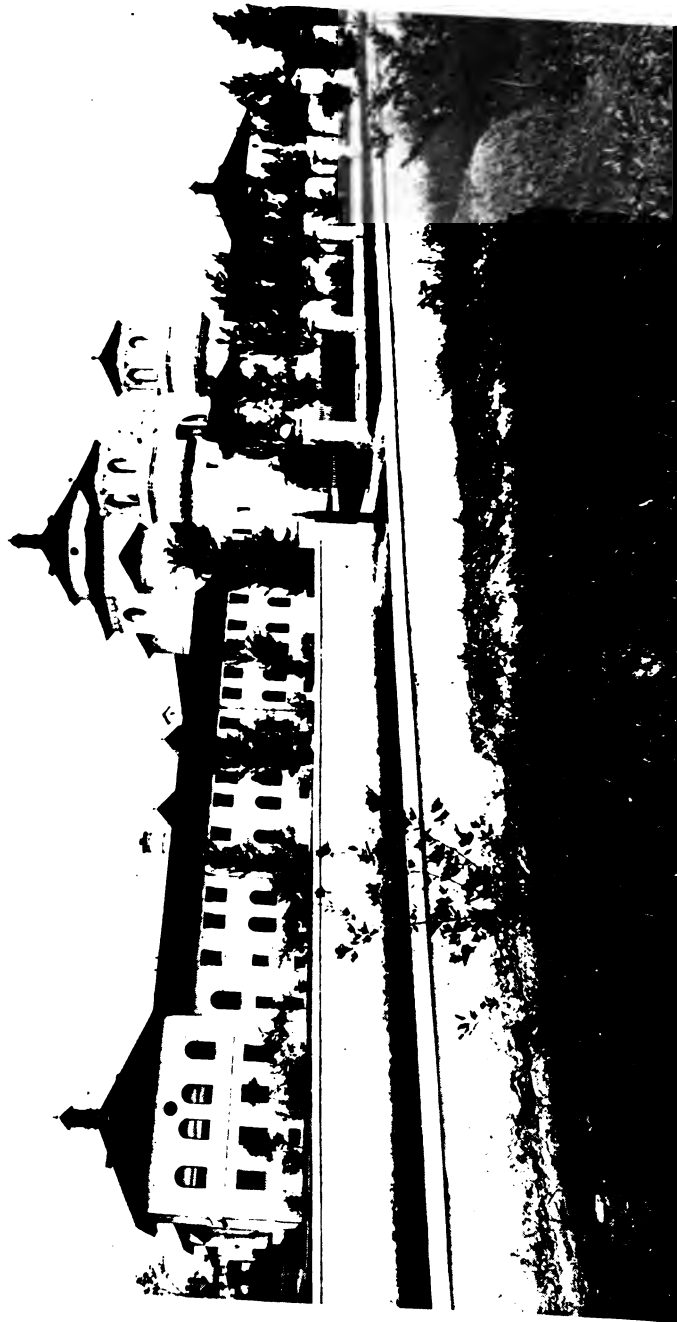




An Exhibit Section, Commercial Museum.

enabled to add this collection to the Museum's treasures. Picturesque and instructive exhibits are installed, which afford the visitor a comprehensive idea of the raw materials, manufactures, utensils and weapons of the most remote countries. These include Japan, China, Formosa, India, Indo-China and Siam. The materials gathered from Africa form one of the most complete collections in the world. The islands of the South Seas are represented by a wide range of native products. The exhibits of the Latin America countries occupy a large space.

For a number of years the Museums were located in the old Pennsylvania Railroad building upon Fourth street, but were removed to the group of large structures upon the west side of the Schuylkill River below Spruce Street ten years ago. These buildings, three in number, are of two floors, each 400 by 100 feet in dimensions, and are of steel,



Pennsylvania Institution for the Instruction of the Deaf and Dumb

concrete and brick construction. The first one, shown in the illustration, has been faced with white terra cotta. The offices of the Museums, its work-rooms and extensive library are in this structure. As a part of its educational work the Museums' management has provided to the schools of the State about fifteen hundred collections of commercial products, accompanied by photographs and maps arranged for the study of particular localities where the varied articles are produced. Educational lantern slides are constantly prepared for loans to schools and for use in the daily lectures to school children of the city, and, upon Saturday afternoons, to the general public. These pictures, treating of travel, are usually beautifully colored and ably described by travellers of experience.

One of the most important among the various activities of the Museums is the Foreign Trade Bureau, which supplies to manufacturers the necessary information to enable them to develop export business and to foreigners the addresses of concerns from which they may buy. Every detail for the assistance of either export or import business is provided here. The Translation Department also helps the business man in the receipt of and reply to foreign letters. The Bureau publishes *The Weekly Export Bulletin*, carrying to American manufacturers news of foreign trade opportunities and *Commercial America*, a monthly magazine in both English and Spanish editions circulating news of American commerce and industry among many thousands of prominent commercial houses in all foreign countries.

The Commercial Museum's Library of Commerce and Travel contains a collection of directories of every foreign and American city or town of importance; also the commercial and consular reports of all countries, and a great number of trade publications and published books of commerce and travel. The Director and his staff are thus able to supply information, up to date, related to the individual business man, of any nationality and in whatever part of the world, and deliver goods to him, or, upon the other hand, to help him in establishing a market for his wares in America.

The Commercial Museum is, in effect, a great permanent international exposition realizing to the fullest extent its broad purpose of fostering, along practical lines, every movement in the direction of trade for our manufacturers with civilized nations everywhere. The Museum may be reached by the Darby or Angora lines of street cars out Walnut street and a short walk along 34th street southward.



Men's Clothing, Trimming-Room.

In Mills and Factories

From among Philadelphia's more than three hundred lines of manufacturing industry a few processes, only, can be cited as important examples.

From the great Pencoyd Iron Works, upon the Schuylkill River, west from Fairmount Park, iron and steel bridges are sent all over the world, along with expert crews to erect them.

The Midvale Steel Company, located in the northern portion of the city, is a contractor, on a large scale, for armor plate and projectiles.

The long-established saw-making plant of Henry Disston & Sons, in the suburb of Tacony, is famous as the largest concern of its kind. Disston saws are used in every country.

The Baldwin Locomotive Works, elsewhere mentioned, is an industry that has made Philadelphia famous wherever civilization is followed by the construction of railway tracks.

The two principal ship-building plants of the port, William Cramp & Sons' Engine and Ship Building Co., and the New York Ship Building Co., in Camden, employ an average of 15,000 men, upon government work and private contracts.



Curtain Manufacture, Folding-Room.



Ribbon-Making, Winding the Silk.



Hat-Making. Process of Fur-Cutting.

Philadelphia is America's largest textile city and in this line gives constant work to a greater number of persons, men and women, than any other department of industry. In worsted and piece goods one hundred and twenty-nine mills produce goods annually to the value of \$35,000,000.

In the carpet industry 45,000,000 yards are made annually, as well as a great output of rugs. This city has a monopoly of the tapestry trade which is valued at \$10,000,000 per year.

The largest lace factory in the world produces from 50,000 to 60,000 pairs of curtains weekly.

Men's clothing to the value of \$20,000,000 and women's garments for nearly as much more are made in 150 factories, employing 15,000 operatives.

The tanning industry uses 150,000 goat skins per diem, Philadelphia dressed kid being in wide demand. Much of this production is consumed here in the manufacture of fine shoes. Fancy leather goods is another leading branch long established.

"Stetson hats," in use wherever men live in the open and ride horses, have literally "made Philadelphia famous."

The metal trades include not only a great number of machine



Metal-Working, Lighting Fixtures.

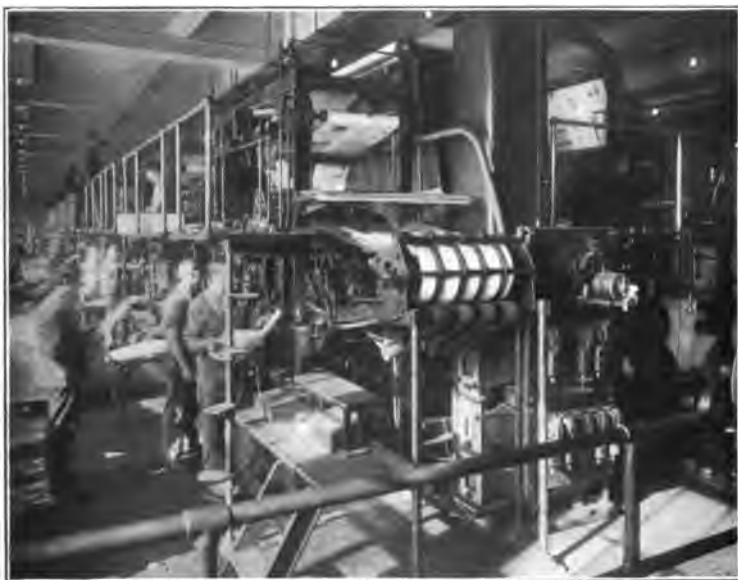


Rope-Making.

shops engaged in making heavy machinery, tools and novelties, but artistic work in candelabra, electric fixtures, wrought iron gates and grills, bronze memorials and statuary. There are several plants also devoted to dental, surgical and scientific instruments.

In excellence of workmanship Philadelphia furniture has no superior. One-third of all the umbrellas and parasols used in the United States are made here. This infers a daily production of from 12,000 to 14,000 in a wide variety of styles.

The commercial printing trade is represented by some two hundred and fifty plants with an output valued at \$10,000,000. In pub-



A Press Room, Curtis Publishing Co.'s Plant.

lishing this city was a pioneer. The establishment, recently completed for the Curtis Publishing Company, exceeds in cost and facilities any other in the world.

The building industries of the city, including the allied lines of lumber, concrete, paints, roofings, fixtures and the like, are in themselves of more importance than the entire manufactures of many cities.

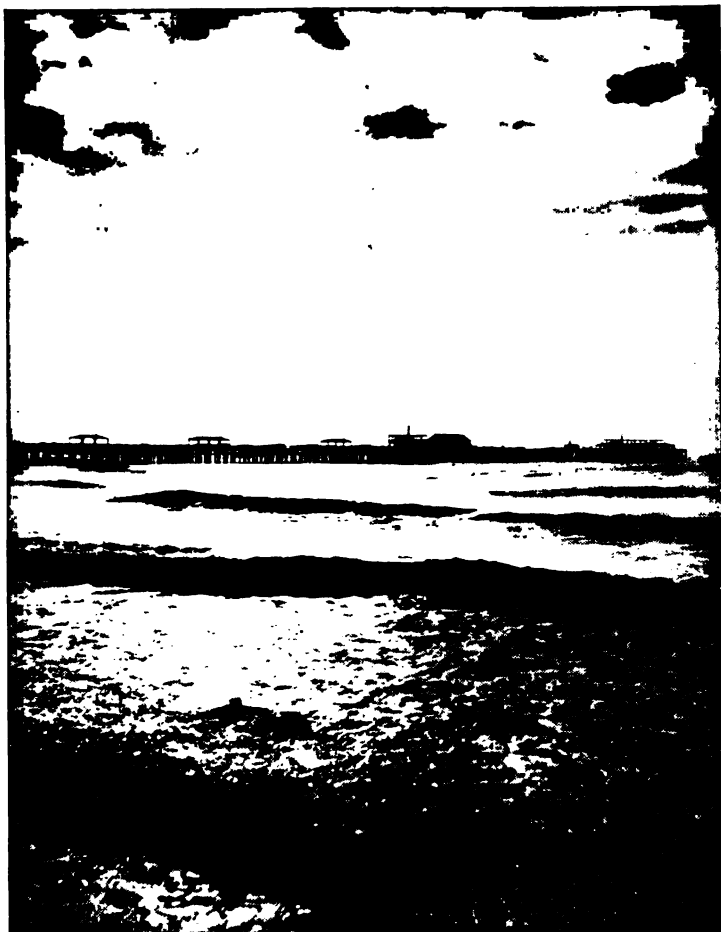
In all these and numerous other lines of progress is seen the stamp of excellent workmanship and artistic design due to the practical training operatives received in our technical institutions.



Umbrellas, Weaving the Silk.



Eiderdown Sacks, the Spinning-Room.



Early Morning—New Jersey Coast.

Seashore Resorts

Philadelphia is but one hour distant from Atlantic City, New Jersey, upon the sea shore. This remarkable and popular resort is connected with Philadelphia by three lines of railway, one being electric. Some of the fastest trains in the world run upon this route. Along the New Jersey coast there are not less than sixty resort points, all easily reached by rail from the city. Southward from Atlantic City are Longport, Ocean City, Sea Isle City, Avalon, Stone Harbor, Wildwood and Cape May. All of these places are rapidly growing in



The Bathing Hour. Atlantic City.

both permanent and summer population and before many years elapse the entire coast, for sixty miles, will present the appearance of a continuous city of relaxation and pleasure. Atlantic City is the most cosmopolitan place in America. Its numerous splendid hotels and famous "boardwalk" are familiar to millions of visitors. An interesting local instance of improvement in facilities for protected navigation, is seen in the State Inland waterway, which is in process of completion. It will extend from Bay Head, N. J., to Cape May, a distance of 120 miles. The route leads through numerous tide-water channels of the salt marshes and across many bays. It is intended to provide a yachting and trading channel connecting all of the resorts along this coast.

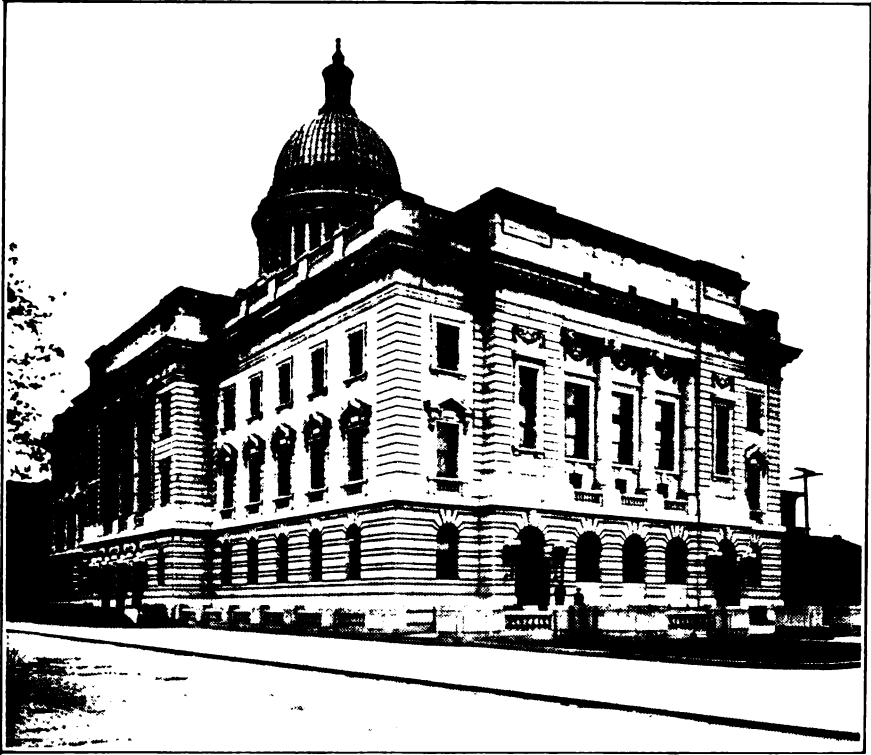


The "Wildwood," Latest Type of Ferryboat.

Northward from Atlantic City, upon the New Jersey coast, are Beach Haven, Barnegat City, Sea Side Park, Bay Head, Avon, Point Pleasant, Ocean Grove, Asbury Park, Elberon, Long Branch and many lesser summer settlements, all of which have developed remarkably in the last twenty-five years. These places are nearly all connected with both Philadelphia and New York City by fast express trains. There are also, in the New Jersey pine belt, a number of popular winter resorts of which Lakewood is the best known. The accessibility of all resort points thus mentioned gives them an assured future of great prosperity. Although the State of New Jersey ranks high in manufactures and contains a score of important industrial cities its greatest element of stability and profit in time to come is believed to be its remarkable extent of sea beach from Sandy Hook to Cape May.



Harbor-making at Avalon, N. J. In connection with the coast inland waterway, now under construction, much dyking and grading of the meadow lands is being done.



Court House, Camden, N. J.

Camden, New Jersey

The City of Camden, New Jersey, is officially an important part of the Port of Philadelphia, its commercial interests being identical with those of its greater neighbor. A considerable portion of its population of 100,000 residents find employment in Philadelphia. Camden's extensive water front still offers large space for the factories of the future. Connected with several lines of ferry steamers its terminal stations of the Pennsylvania and Philadelphia & Reading rail systems are not only the gateways to the seashore, but also to scores of pleasant and prosperous towns and villages through central and southern New Jersey. The future residential spread of population will tend largely in this direction. Within the decade covered by the latest United States census the manufactures of Camden have gained 22 per cent. in the number of establishments and 46 per cent. in the annual value of products.



The long discussed project for a tunnel beneath the river, which will connect Philadelphia and Camden, has been revived and the work will probably be undertaken soon.

According to the census reports Camden contains 365 factories, having an aggregate capital of \$50,000,000, and an output in about the same amount.

The industries of Camden produce war and commercial ships, furniture, iron and foundry work, lumber, leather, shoes, chemicals, dyes, knit goods, paints, paper, carriages, talking machines, coffee, confectionery and many other specialties.

Camden has nine Banks and Trust Companies. An active Board of Trade is devoted to the many problems of local advancement.

Bristol, Pa.

The town of Bristol, situated on the Delaware River, twenty miles north of Philadelphia, is a thriving manufacturing town of 10,000 population. Chartered as a market town in 1697, it was erected into a Borough just twenty-three years later, 1720, and enjoys the distinction of being the third oldest town and the second chartered Borough in the state of Pennsylvania.

It began its career as a manufacturing town in 1701, when Samuel Carpenter, a wealthy merchant of Philadelphia, attracted by the natural facilities for water power, erected and equipped mills for the grinding of grain and the sawing of timber. This industry was responsible for the establishment of a ship building industry upon Mill Creek, the timber for which the local mill aided in preparing and further aided in providing cargoes for the ships when built to carry, and thus it was for practically a century, the industry of the neighborhood consisted in the building of ships, the sawing of timber and the grinding of grain, which was freely exported to various parts of the world.

The year 1827 saw the beginning of the construction by the state of the Delaware Division of the Lehigh Canal, which was completed three years later, and furnished thereby an outlet from the anthracite coal regions of the north to tidewater. This development brought much activity in shipping lines and much labor found employment in handling the cargoes of coal. Over 250,000 tons of coal were shipped from Bristol in one season. Twenty-five years after the opening of the canal, the extension of the Philadelphia & Reading Railroad from Bethlehem to Philadelphia, by which route thereafter coal was



shipped to their yards in Port Richmond on the Delaware, removed from the town this employment and business which had for a quarter of a century played an important part in its growth and prosperity.

In 1853 the Bristol Forge was established for the purpose of making wrought iron. During the Civil War the demand for armor plates for government warships created a market for its product, both active and profitable, and its capital stock was increased and the works enlarged. It was in this forge that the plates for the hull of the "New Ironsides," the first armored frigate of war, were made.

The year 1868 is notable in Bristol's industrial history as marking the return of Joshua Peirce to Bristol, after several years' residence in the western part of Pennsylvania, as well as the beginning of Bristol's rapid industrial development. Mr. Peirce established the Livingstone Mills for the manufacture from wool of felt products. He was also instrumental in locating here the Bristol foundry and other important industries, one of which, the worsted mills now owned by Mr. Joseph R. Grundy, is the largest plant in Bristol.

Other important concerns are the Keystone Mill, manufacturing fringe and silk; Bristol Carpet Mills, Corona Leather Works, a wall paper industry, and the Standard Cast Iron Pipe and Foundry Co.'s Works.

In the 183 years since the settlement of the town, to 1860, the population had grown to only 2,500. Fifty years later it reached nearly 10,000 souls. The assessed valuation which in 183 years had reached nearly \$500,000 in 1860, since has grown to \$3,000,000, and the number of people employed in the mills approximate 3,300, the wages annually paid to these operatives total \$1,750,000, while the value of the manufactured product amounts substantially to \$12,000,000.

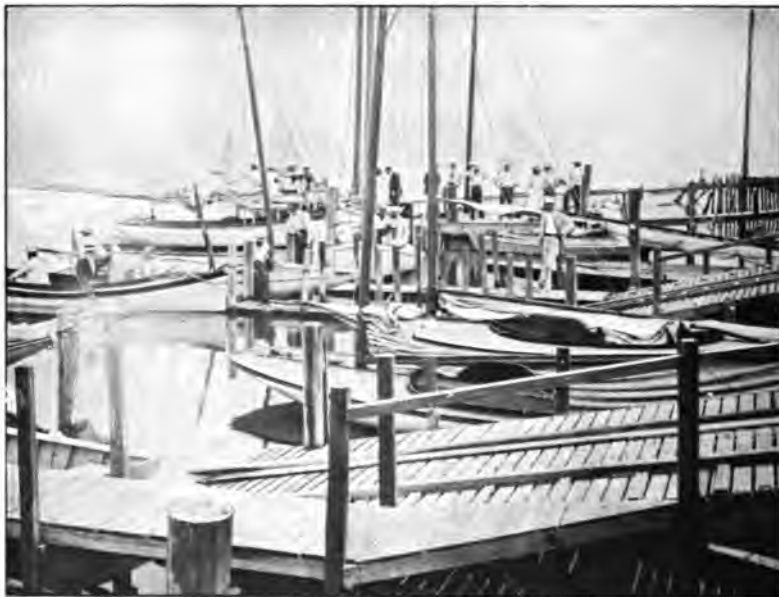
The past decade in Bristol has been one of marked prosperity in its industrial development; its population has increased 40 per cent. over that of 1900, and never in the history of the Borough has there been a year when expenditures for development and advancement of the community, have been as great as that of the year 1911. During the year one enterprise, that of changing the course of the Pennsylvania Railroad through the town, involved an expenditure of more than \$1,000,000. In the development and extension of mill operations \$750,000 has been spent, which directly reflects a condition of business activity and industrial development much to be desired.



State Capitol, Trenton, N. J.

Trenton, New Jersey

The city of Trenton, State Capital of New Jersey, is at the head of navigation upon the Delaware River, thirty-three miles from Philadelphia, with a population of 100,000. It is essentially an industrial point. Of its one hundred and sixty-eight manufacturing plants, forty-nine are devoted to pottery, porcelain and tile production. In specialties of this line it leads the country. The rubber industry is represented by nineteen concerns. The extensive iron, steel and copper wire establishment of J. A. Roebling Sons Company is the largest in the world. Trenton crackers have long been famous. In other lines Trenton workshops produce machinery, agricultural implements, automobiles, carriages, bridges, elevators, engines, cements, castings, store fixtures, silk wear, linoleum, boats and paper boxes. In these varied industries from 20,000 to 25,000 persons are employed. The city has shipping facilities by rail, river and canal. This centre of activity will benefit greatly by the completion of the proposed ship canal connecting the Delaware River with Raritan Bay and the Port of New York. Trenton is now under the Commission form of government.



Among the Yachtsmen of the Upper Delaware River.

Other Up River Industries

At Riverside, N. J., are the fine modern plants of the Philadelphia Watch Case Company and of the Keystone Watch Case Company. At Florence is located the Florence Iron Works; at Burlington, the United States Cast Iron Pipe and Foundry Co. Each of these places possesses a variety of lesser industries in many lines. This stretch of the Delaware River will form a part of the projected water route to connect New York with the Port of Philadelphia and the improved waterways along the coast, thus affording the promise of cheap transportation for all of the large shippers situated in these busy lesser centres of manufacturing.

The Welsbach Plant, Gloucester, N. J.

One of the great modern industries developed by the genius of invention is that of the Welsbach Company. The numerous factory, warehouse and office buildings of this plant are located at Gloucester, N. J., opposite the southern extreme of Philadelphia. Here are made the famous "Reflex" mantles and artistic lighting appliances and fixtures now in common use wherever gas is used as an illuminant.



Plant of the Welsbach Company, Gloucester, N. J.

Chester, Pa.

The Industrial City of Chester is located upon the western shore of the Delaware River, about twelve miles "down river" from Philadelphia. Chester is the oldest town in Pennsylvania, its settlement antedating that of Philadelphia by some forty years. Under its original name, Upland, it was long the seat of the earliest courts. The first permanent settlement of Europeans was made here by Swedes, to the memory of whom the "Old Swedes Church" remains an honored relic of the community. Chester has three miles of river frontage, and along the navigable stream of Chester Creek there is much additional tide-water space.

Chester is, officially, a part of the Port of Philadelphia. It is upon the main lines, southward, of the Pennsylvania and Baltimore & Ohio Railroad systems. The Philadelphia & Reading system also maintains a Chester branch line. Numerous large industries are in operation here, in the manufacture of iron, steel, edge tools, machinery, cotton and woolen goods, lace curtains, silicate of soda, magnesia and chrome brick, dyestuffs, chemicals, ice, lubricating oils, ships, and refined petroleum.

The mills of the Aberfoyle and Eddystone manufacturing companies are located upon the northern approach to the city. Other great establishments are the Chester Branch of the Baldwin Locomotive Works, the Patterson Mills, Huston Manufacturing Co., Federal Steel Co., Robert Wetherill & Co., engine builders, American Dye-wood Co., Seaboard Steel Co., American Steel Foundries, Keystone Plaster Co., Penn Casting and Machine Co., and Arasapha Manufacturing Co.

The Pennsylvania Military Academy located upon elevated ground in the residential section, is an old and famous institution. Many beautiful homes grace the shady avenues of the city. Electric car service is in operation between Chester and Philadelphia, and similar lines radiate to all sections of the picturesque surrounding country. Regular steamer lines are also operated to Philadelphia.

The business interests of Chester are represented effectively by its Board of Trade, which is alert for all things promising to advance the city's welfare.

At Marcus Hook, below Chester, is located an important group of oil refining plants. At this point the crude oil is received in tank steamships from the Texas oil fields, and in tank cars from those of Pennsylvania.



At the End of the Voyage.

Wilmington, Del.

The original colony early located here beside the Delaware shore was attracted by the fair opening and haven of the Christiana river, and the town growing in time into a city spread up the slope, filling the space between the Christiana river and the picturesque Brandywine stream. Its suburbs have long since gone far beyond these limits. The present population is about 92,000. The tracks of four railroad systems traverse the city. The city has 33 miles of electric street railways. The investment in manufactures is above \$40,000,000. Wages annually paid aggregate \$10,000,000. The largest powder-making plant in the world, that of the du Pont de Nemours Powder Co., is located here. The Lobdell car wheel plant, the Pyle patent leather factory, and the Bancroft cotton goods finishing concern are all the largest of their kind in the country. The Edgemoor bridge-building establishment is also the largest in its line. The Harlan & Hollingsworth and the Pusey & Jones ship-building plants are widely known. Another large industry is that of the Diamond State Steel Company. Three car-building works and a silk mill are noteworthy.



Oldest Powder Mill in America. Erected upon the banks of the Brandywine River, by E. I. Du Pont, in 1802.

Regular service by river between Wilmington and Philadelphia is performed by the Wilmington Steamboat Co. and for freight by the Bush-Warner Company.

Wilmington is upon the great highway of travel north and south. One hundred and eighty-seven trains pass through the city daily.

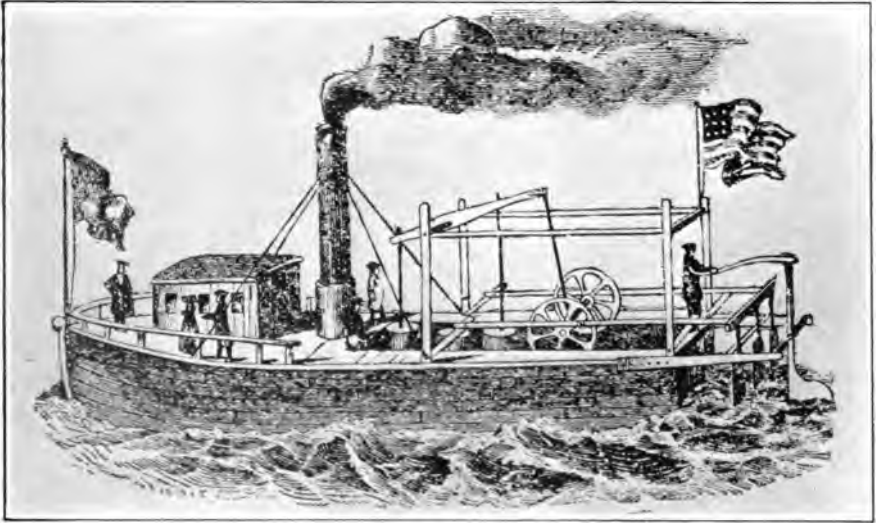
The Powder Makers of the Brandywine.

The manufacture of gunpowder, in the valley of the Brandywine River, is probably the oldest industry upon the Delaware River.

Established by E. I. DuPont Nemours, in 1802, soon after his arrival in this country from revolutionary-swept France, it has remained constantly in the control of his family and descendants, who have also been largely interested in other leading powder-making concerns and thus made Wilmington the centre of the industry in America. The present ownership is vested in three members of the present generation, Mr. J. Coleman DuPont being the President. The DuPonts have long been the largest manufacturers of powders and dynamite.

In times of peace the sons of the family have habitually worked manually in the closely-guarded shops; in periods of war they have become leaders of brigades and commanders of battle-ship fleets.

Few others of the noble families of old France, seeking asylum upon our shores have reached such influence and wealth or identified themselves in so many ways with our national history.



The First Passenger Steamboat.

The magnitude of the Hudson-Fulton celebration which was held in the city of New York and upon the waters of the Hudson river in September, 1909, and especially the appearance upon the occasion, of a reproduction of the steamer Clermont, has tended to the impression with many people that Robert Fulton's vessel was the pioneer steamboat in American waters.

The above illustration from a contemporary print is a picture of the third experimental steamboat built by John Fitch. It was navigated upon the Delaware River at Philadelphia in 1788, nineteen years before the Clermont appeared and astonished the people of New York and the valley of the Hudson River. In 1790 Fitch's steamboat was operated, for three months, upon a regular route between Philadelphia and Trenton. This boat made a speed of about seven miles per hour. Its time table was advertised in the newspapers. As a commercial venture it was not successful, due largely to the fact that Fitch, although a great genius in the field of invention, lacked in the ability to convince capital and secure a proper financial support. His business troubles eventually drove him to suicide. Robert Fulton and his associate, Livingston, had secured a monopoly of steam navigation upon the Hudson River and were able to demonstrate the economy and certainty of this mode of travel. The Delaware River must be given the credit of being the scene of the most notable early experiments in this line.

Foreign Consuls at Philadelphia

ARGENTINE REPUBLIC—Consul, William P. Wilson 34th Street below Spruce
AUSTRIA-HUNGARY—Consul, George de Grivicic; Consular Attache, Baron de
Pidoll 900 Pine Street
BELGIUM—Consul General, Paul Hagemans; Chancellor, Jacques Hagemans.
6357 Woodbine Avenue, Overbrook
Consul, Hermann Hessenbruch 8 North Fifth Street
BOLIVIA—Consul, Wilfred H. Schoff 34th Street, below Spruce
BRAZIL—Vice-Consul, N. B. Kelly 211 Bourse
CHILE—Consul, Dudley Bartlett 34th Street below Spruce
CHINA—Honorary Consul, Thomas W. Barlow 1003 Franklin Bank Building
COLOMBIA—Consul, Charles R. Toothaker 34th Street below Spruce
COSTA RICA—Consul, Wilfred H. Schoff 34th Street below Spruce
CUBA—Consul, J. J. Luis; Chancellor, Higinio J. Medrano 608 Chestnut Street
DENMARK—Vice-Consul, Christian Moe 305 Walnut Street
ECUADOR—Vacant 34th Street below Spruce
FRANCE—Vice-Consul, M. Heilmann 524 Walnut Street
GERMAN EMPIRE—Consul, Dr. A. Mudra 226 South Seventh Street
GREAT BRITAIN—Consul, Wilfred Powell; Vice-Consul, Hugh Alexander
Ford; Vice-Consul, Ed. Waring Wilson 701 Pine Street
GREECE—Consul, Aristotle Tsakonas 5801 Chestnut Street
GUATEMALA—Consul, Dudley Bartlett 34th Street below Spruce
HONDURAS—Consul, Robert J. Winsmore 109 Walnut Street
ITALY—Consul, J. C. Majoni; Vice-Consul, Count C. Constantin de
Chateaufneuf 717 Spruce Street
JAPAN—Honorary Consul, J. Franklin McFadden 121 Chestnut Street
LIBERIA—Consul, Thomas J. Hunt 532 Walnut Street
Vice-Consul, Dr. Robert C. Moon 1319 Walnut Street
MEXICO—Consul, J. L. Canalizo; Vice-Consul, Casper Wistar Haines; Chan-
cellor, Juan B. Saldana 978 Drexel Building
NETHERLANDS—Consul, Arnold Katz 716 Walnut Street
NICARAGUA—Consul General, Lorenzo H. C. Guerrero; Consul, Dr. Timoteo
Vaca Seydel 605 N. Sixty-third Street
NORWAY—Vice-Consul, Christian Moe 305 Walnut Street
PANAMA—Vice-Consul, Wilfred H. Schoff 34th Street below Spruce
PARAGUAY—Consul General, Rodman Wanamaker 1300 Market Street
PERU—Consul, Wilfred H. Schoff 34th Street below Spruce
PERSIA—Vice-Consul, Haig Herant Pakradooni Overbrook
PORTUGAL—Vice-Consul, J. J. de Macedo, Jr. 209 South Third Street
RUSSIA—Vice-Consul, W. R. Tucker 258 Bourse
SALVADOR—Consul, Robert J. Winsmore 109 Walnut Street
SPAIN—Vice-Consul, H. C. Newcomb 302 Walnut Street
SWEDEN—Vice-Consul, Marcel A. Viti 818 Franklin Bank Building
SWITZERLAND—Consul, G. A. Walther 697 Drexel Building
URUGUAY—Consul, Rodman Wanamaker 1300 Market Street
VENEZUELA—Consul, Dr. Frederick C. Chirinos 2656 East Allegheny Avenue

Philadelphia Chamber of Commerce

Officers and Directors for the Year 1912

President	FINLEY ACKER
First Vice President	CHARLES J. COHEN
Second Vice-President	CHARLES P. VAUGHN
Secretary	N. B. KELLY
Treasurer	RICHARD L. AUSTIN

DIRECTORS

Louis S. Amonson, Walter A. Bailey, John E. Baird, Edward F. Beale, Charles M. Biddle, Charles E. Cattell, John G. Croxton, Thomas Devlin, Samuel S. Fels, T. James Fernley, Harry B. French, Howard B. French, Frank Gould, John E. Hanifen, Thomas B. Harbison, William O. Hempstead, Walter Horstmann, E. C. Irvin, J. T. Jackson, James Collins Jones, David P. Leas, Lewis J. Levick, Thomas Martindale, William McAleer, Jr., A. C. McGowin, J. A. McKee, Horace T. Potts, Francis B. Reeves, Jr., E. O. Roth, Coleman Sellers, Jr., Clayton F. Shoemaker, Franklin Smedley, John C. Sullivan, William W. Supplee, Charles Z. Tyron, Walter Wood.

Philadelphia Maritime Exchange

President	J. W. S. HOLTON
Vice-President	P. F. YOUNG
Treasurer	P. D. TODD
Secretary	E. R. SHARWOOD
Assistant Secretary	JAS. T. KERNAN
Solicitor	JOHN F. LEWIS

DIRECTORS

Joseph A. Ball, John H. Baizley, R. J. Watson, P. D. Todd, William M. Kerr, T. W. Munn, E. J. Lavino, John W. Liberton, Charles E. Mather, Emory H. Johnson, L. J. Graff, Charles C. Hahl, J. W. S. Holton, P. F. Young, D. S. Stetson, James B. Bonner, William J. Grandfield, Walter F. Hagar, William J. Bradley.

Commercial Exchange

President	ANTONIO SANS
Vice-President	LOUIS G. GRAFF
Treasurer	JOSEPH W. BEATTY
Secretary	FRANK E. MARSHALL

DIRECTORS

William M. Richardson, Winfield S. Woodward, Walter K. Woolman, Jacob B. Pultz, Samuel J. Clevenger, G. Percy Lemont, George M. Richardson, C. Herbert Bell, Samuel L. McKnight, John J. Buckley, Emanuel H. Price, Barnabas Devitt.

Philadelphia Board of Trade

President	WILLIAM M. COATES
First Vice-President	EDWARD R. WOOD
Second Vice-President	WILLIAM H. CASTLE
Third Vice-President	ALEXANDER C. FERGUSON
Fourth Vice-President	FRANK D. LA LANNE
Secretary and Assistant Treasurer	WILLIAM R. TUCKER
Treasurer	HENRY A. FRY

The Merchants and Manufacturers Association

President	GEORGE W. CHAPIN
First Vice-President	D. T. FLEISHER
Second Vice-President	WM. H. WEIMER, JR.
Treasurer	MORRIS DANNENBAUM
Secretary	C. W. SUMMERFIELD

DIRECTORS

George W. Chapin, H. McIlvain Biddle, D. T. Fleisher, Wm. H. Weimer, Jr., Joel Cadbury, O. F. Lucas, George Rommel, Calvin M. Smyth, Frank S. Evans, Walter Whetstone, Milton Campbell, Edwin W. Purnell, Morris Dannenbaum, Frank W. Huff, J. H. Cummings, George L. Mitchell, Paul A. Vanneman, D. V. Brown, Albert J. Sullivan, Wm. E. Lucas, Morgan H. Thomas.

The Master Builders' Exchange

President	H. S. ANDRUS
First Vice-President	JOHN R. WIGGINS
Second Vice-President	JOSEPH M. STEELE
Third Vice-President	WM. R. DOUGHERTY
Treasurer	FRANK H. REEVES
Secretary and General Superintendent	CHARLES ELMER SMITH

BOARD OF DIRECTORS

J. Turley Allen, H. S. Andrus, F. F. Black, D. O. Boorse, Joseph E. Brown, A. G. Buvinger, John J. Byrne, William R. Dougherty, Charles H. Fowler, F. M. Harris, Jr., William B. Irvine, C. I. Leiper, William S. Lilly, John R. Livezey, William T. Reynolds, Patrick S. Smith, Edwin DeH. Steel, Joseph M. Steele, Jacob L. Tyson, George J. Watson, Col. John R. Wiggins.

Board of Trustees of the Philadelphia Museums Commercial Museum

EX-OFFICIO

JOHN K. TENER	Governor of Pennsylvania
RUDOLPH BLANKENBURG	Mayor of Philadelphia
H. C. RANSLEY	President of Select Council
GEORGE MCCURDY	President of Common Council
HENRY R. EDMUNDS	President of the Board of Public Education
DR. MARTIN G. BRUMBAUGH	Superintendent of Public Schools
DR. NATHAN C. SCHAEFFER	State Superintendent of Public Instruction
ROBERT S. CONKLIN	State Forestry Commissioner

BY APPOINTMENT

DANIEL BAUGH	W. S. HARVEY
WILSON H. BROWN	W. W. SUPPLEE
THEODORE N. ELY	W. T. TILDEN
HOWARD B. FRENCH	CHARLES F. WARWICK
ELLIS A. GIMBEL	W. P. WILSON
SIMON GRATZ	SYDNEY L. WRIGHT

OFFICERS OF THE BOARD

W. S. HARVEY	President
CHARLES F. WARWICK	Vice-President and Counsel
DANIEL BAUGH	Treasurer
WILFRED H. SCHOFF	Secretary and Assistant Treasurer

EXECUTIVE COMMITTEE

W. W. SUPPLEE, Chairman

WILSON H. BROWN	THEODORE N. ELY
DANIEL BAUGH	W. S. HARVEY

DIRECTOR OF THE MUSEUMS

W. P. WILSON, Sc D.

CURATOR

CHARLES R. TOOTHAKER

LIBRARIAN

JOHN J. MACFARLANE

CHIEF OF THE FOREIGN TRADE BUREAU

DUDLEY BARTLETT

THIS book has been prepared for the information of the Delegates to the Twelfth Congress of the Permanent International Association of Navigation Congresses, held at Philadelphia, U. S. A., beginning upon May 23rd, 1912. For the convenience of Foreign Delegates special editions have been printed in the German and French languages.

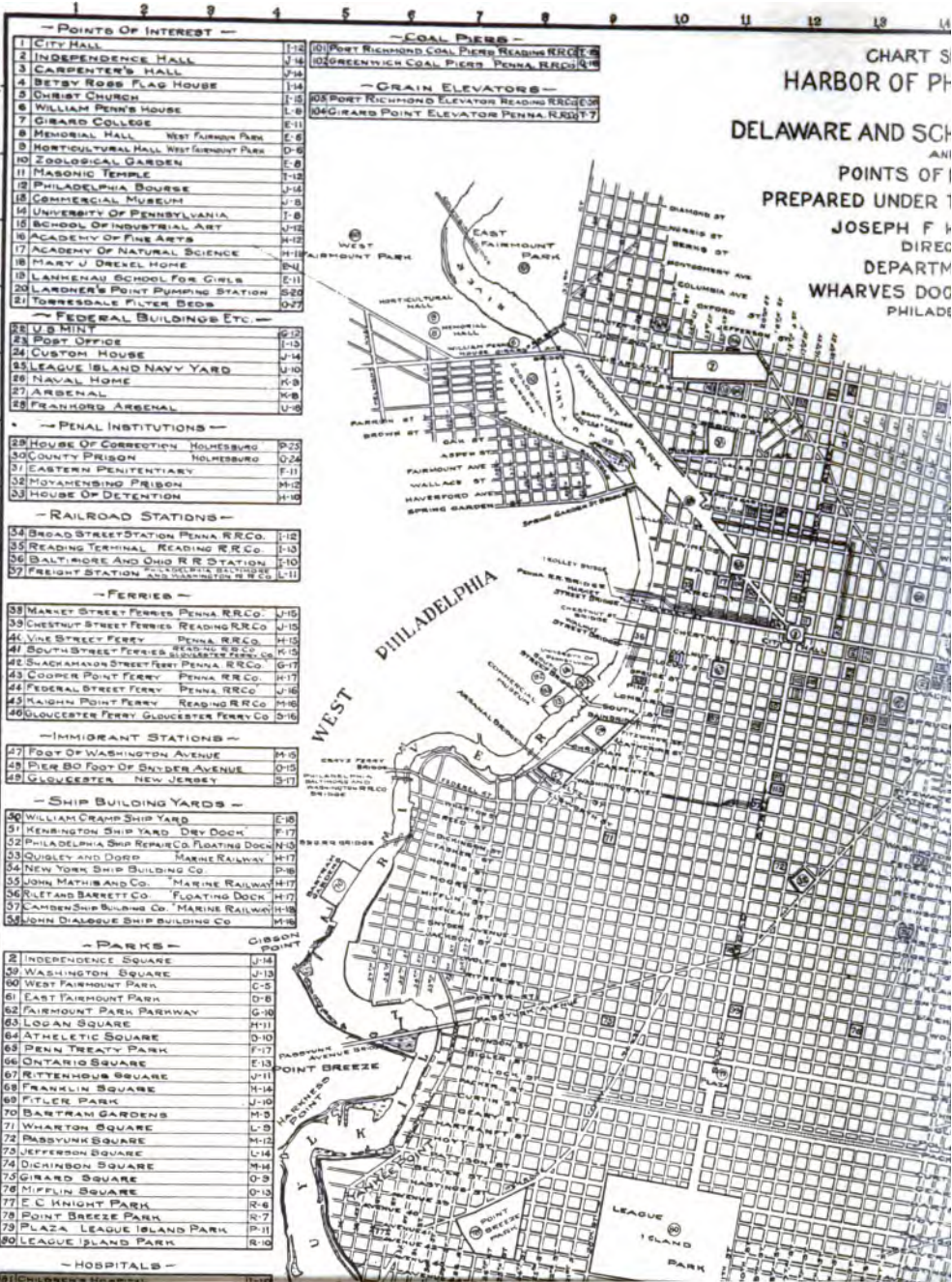


CHART S
HARBOR OF PH
DELAWARE AND SCH
AND
POINTS OF I
PREPARED UNDER T
JOSEPH F H
DIRECT
DEPARTM
WHARVES DOG
PHILADE

- 1 CITY HALL J-12
2 INDEPENDENCE HALL J-14
3 CARPENTER'S HALL J-14
4 BETSY ROSS FLAG HOUSE J-14
5 CHRIST CHURCH L-15
6 WILLIAM PENN HOUSE L-9
7 GIRARD COLLEGE E-11
8 MEMORIAL HALL WEST FAIRMOUNT PARK E-6
9 HORTICULTURAL HALL WEST FAIRMOUNT PARK D-6
10 ZOOLOGICAL GARDEN E-8
11 MASONIC TEMPLE T-12
12 PHILADELPHIA BOUSE J-14
13 COMMERCIAL MUSEUM J-11
14 UNIVERSITY OF PENNSYLVANIA T-8
15 SCHOOL OF INDUSTRIAL ART J-12
16 ACADEMY OF FINE ARTS H-12
17 ACADEMY OF NATURAL SCIENCE H-12
18 MARY J. DRESEL HOME E-11
19 LANHANA SCHOOL FOR GIRLS E-11
20 LARDNER'S POINT PUMPING STATION S-22
21 TORRESDALE FILTER BEDS O-27
22 FEDERAL BUILDINGS ETC. J-12
23 POST OFFICE J-12
24 CUSTOM HOUSE J-14
25 LEAGUE ISLAND NAVY YARD J-10
26 NAVAL HOME K-9
27 ARSENAL K-8
28 FRANKFORD ARSENAL U-9
29 HOUSE OF CORRECTION HOLMESBURG P-23
30 COUNTY PRISON HOLMESBURG O-24
31 EASTERN PENITENTIARY T-11
32 MOYAMENING PRISON H-12
33 HOUSE OF DETENTION H-10
34 BROAD STREET STATION PENNA. R.R. CO. J-12
35 READING TERMINAL READING R.R. CO. J-13
36 BALTIMORE AND OHIO R.R. STATION J-10
37 FREIGHT STATION AND WASHINGTON R.R. CO. L-11
38 MARKET STREET FERRIES PENNA. R.R. CO. J-15
39 CHESTNUT STREET FERRIES READING R.R. CO. J-15
40 VINE STREET FERRY PENNA. R.R. CO. H-15
41 SOUTH STREET FERRY PENNA. R.R. CO. K-13
42 SHADAMAW STREET FERRY PENNA. R.R. CO. G-17
43 COOPER POINT FERRY PENNA. R.R. CO. J-17
44 FEDERAL STREET FERRY PENNA. R.R. CO. J-16
45 RAIGHN POINT FERRY READING R.R. CO. H-16
46 GLOUCESTER FERRY GLOUCESTER FERRY CO. D-16
47 FOOT OF WASHINGTON AVENUE M-13
48 PIER 80 FOOT OF GARDEN AVENUE O-15
49 GLOUCESTER NEW JERSEY S-17
50 WILLIAM CRAMP SHIP YARD E-18
51 KENNINGTON SHIP YARD DRY DOCK F-17
52 PHILADELPHIA SHIP REPAIR CO. FLOATING DOCK N-9
53 QUIGLEY AND DODD MARINE RAILWAY H-17
54 NEW YORK SHIP BUILDING CO. D-18
55 JOHN MATHIAS & CO. MARINE RAILWAY H-17
56 ELTARD BARRETT CO. FLOATING DOCK H-17
57 CAMDEN SHIP BUILDING CO. MARINE RAILWAY H-18
58 JOHN DIAL & CO. SHIP BUILDING CO. H-18
59 WASHINGTON SQUARE J-14
60 WEST FAIRMOUNT PARK C-5
61 EAST FAIRMOUNT PARK D-6
62 FAIRMOUNT PARK PARKWAY G-10
63 LOGAN SQUARE M-11
64 ATHLETIC SQUARE O-10
65 PENN. TREATY PARK F-17
66 ONTARIO SQUARE E-13
67 RITTENHOUSE SQUARE J-11
68 FRANKLIN SQUARE H-14
69 FITLER PARK J-10
70 BARTRAM GARDENS M-5
71 WHARTON SQUARE L-9
72 PASSYUNK PARK M-12
73 JEFFERSON SQUARE U-14
74 DICKINSON SQUARE M-14
75 GIRARD SQUARE O-9
76 NIPPLIN SQUARE O-13
77 C. C. KNIGHT PARK R-6
78 POINT BREEZE PARK O-7
79 PLAZA LEAGUE ISLAND PARK P-11
80 LEAGUE ISLAND PARK R-10

PHILPHIA
RIVERS

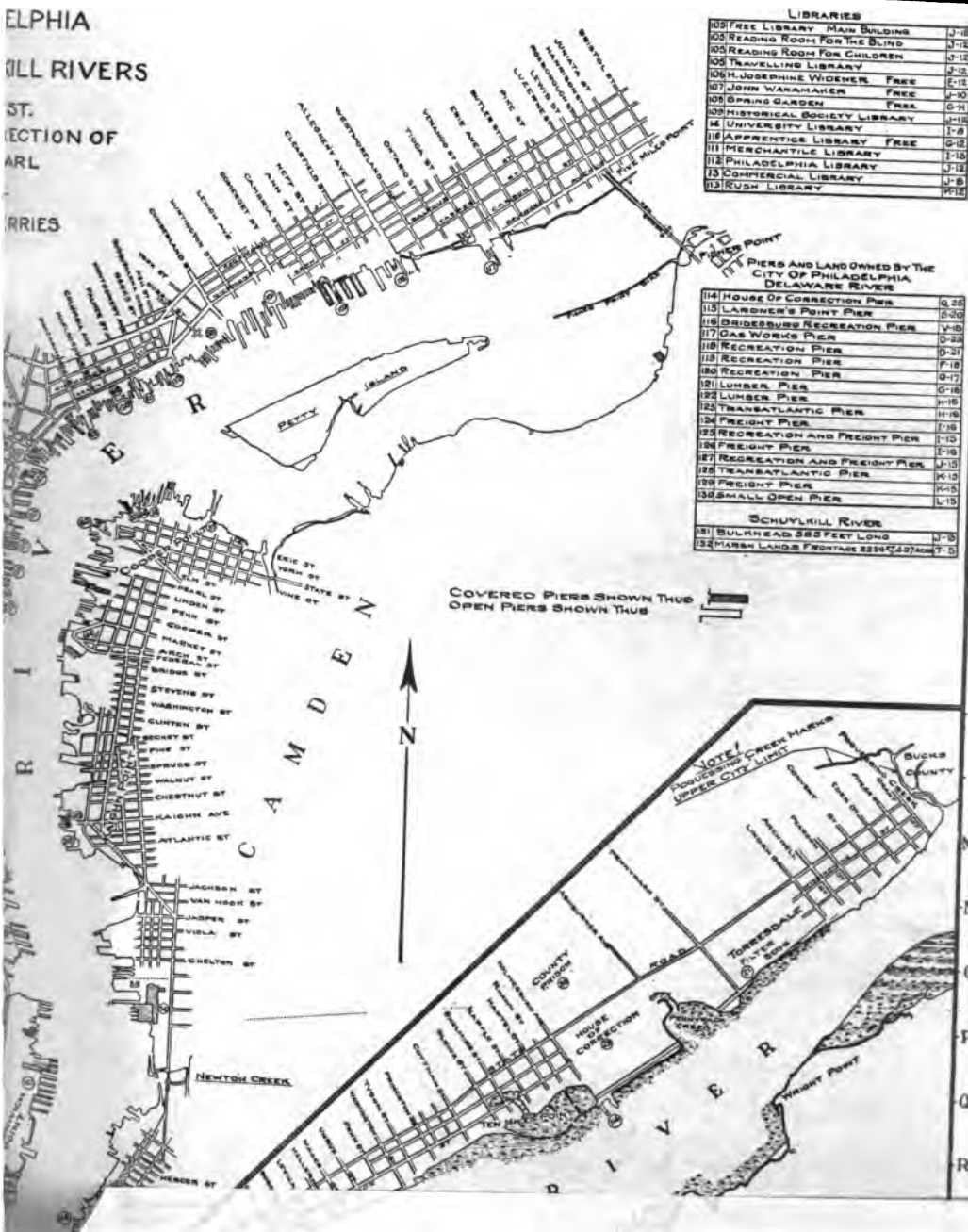
ST.
SECTION OF
ARL

RRIES

LIBRARIES	
105 FREE LIBRARY MAIN BUILDING	J-18
105 READING ROOM FOR THE BLIND	J-18
105 READING ROOM FOR CHILDREN	J-18
105 TRAVELLING LIBRARY	J-18
105 H. JOSEPHINE WIDENER FREE	J-18
107 JOHN WARRAKER FREE	J-30
109 SPRING GARDEN FREE	G-1
109 HISTORICAL SOCIETY LIBRARY	J-18
14 UNIVERSITY LIBRARY	J-18
118 APPRENTICE LIBRARY FREE	G-2
118 MERCHANTILE LIBRARY	J-18
118 PHILADELPHIA LIBRARY	J-18
113 COMMERCIAL LIBRARY	J-18
113 RUSH LIBRARY	J-18

PIERS AND LAND OWNED BY THE CITY OF PHILADELPHIA DELAWARE RIVER	
114 HOUSE OF CORRECTION PIER	G-28
115 LANDREY'S POINT PIER	G-30
116 BRIDGESIDE RECREATION PIER	G-30
117 GAS WORKS PIER	G-30
118 RECREATION PIER	G-31
119 RECREATION PIER	F-18
120 RECREATION PIER	G-17
121 LUMBER PIER	G-18
122 LUMBER PIER	H-18
123 TRANSATLANTIC PIER	H-18
124 FREIGHT PIER	J-18
125 RECREATION AND FREIGHT PIER	I-18
126 FREIGHT PIER	F-18
127 RECREATION AND FREIGHT PIER	J-18
128 TRANSATLANTIC PIER	K-18
129 FREIGHT PIER	K-18
130 SMALL OPEN PIER	L-18
SCHUYLKILL RIVER	
131 BULKHEAD 385 FEET LONG	J-18
132 MARSH LANDS FRONTAGE 2220' 6" 27' 6"	J-18

COVERED PIERS SHOWN THUS
OPEN PIERS SHOWN THUS



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters. The text outlines various methods for organizing and storing data, including digital databases and physical filing systems.

2. The second section focuses on the role of technology in modern record management. It highlights how digital tools can streamline processes, reduce errors, and facilitate quick retrieval of information. Examples of software solutions and cloud storage options are provided, along with considerations for data security and privacy.

3. The third part of the document addresses the challenges of data integration and interoperability. It discusses the need for standardized formats and protocols to ensure that information from different sources can be effectively combined and analyzed. The text also touches upon the importance of regular backups and disaster recovery plans to protect against data loss.

4. The final section provides a summary of key recommendations and best practices. It encourages organizations to adopt a proactive approach to record management, regularly reviewing and updating their policies and procedures. The document concludes by emphasizing that effective record-keeping is not just a technical task but a strategic imperative for long-term success.

THE BORROWER WILL BE CHARGED AN OVERDUE FEE IF THIS BOOK IS NOT RETURNED TO THE LIBRARY ON OR BEFORE THE LAST DATE STAMPED BELOW. NON-RECEIPT OF OVERDUE NOTICES DOES NOT EXEMPT THE BORROWER FROM OVERDUE FEES.

WIDENER
-BOOK DUE
CANCELLED
AUG 26 1991
AUG 20 1992

WIDENER
AUG 22 1992
BOOK DUE

WIDENER
WIDENER
DEC 09 2004
DEC 17 2004
CANCELLED
BOOK DUE

